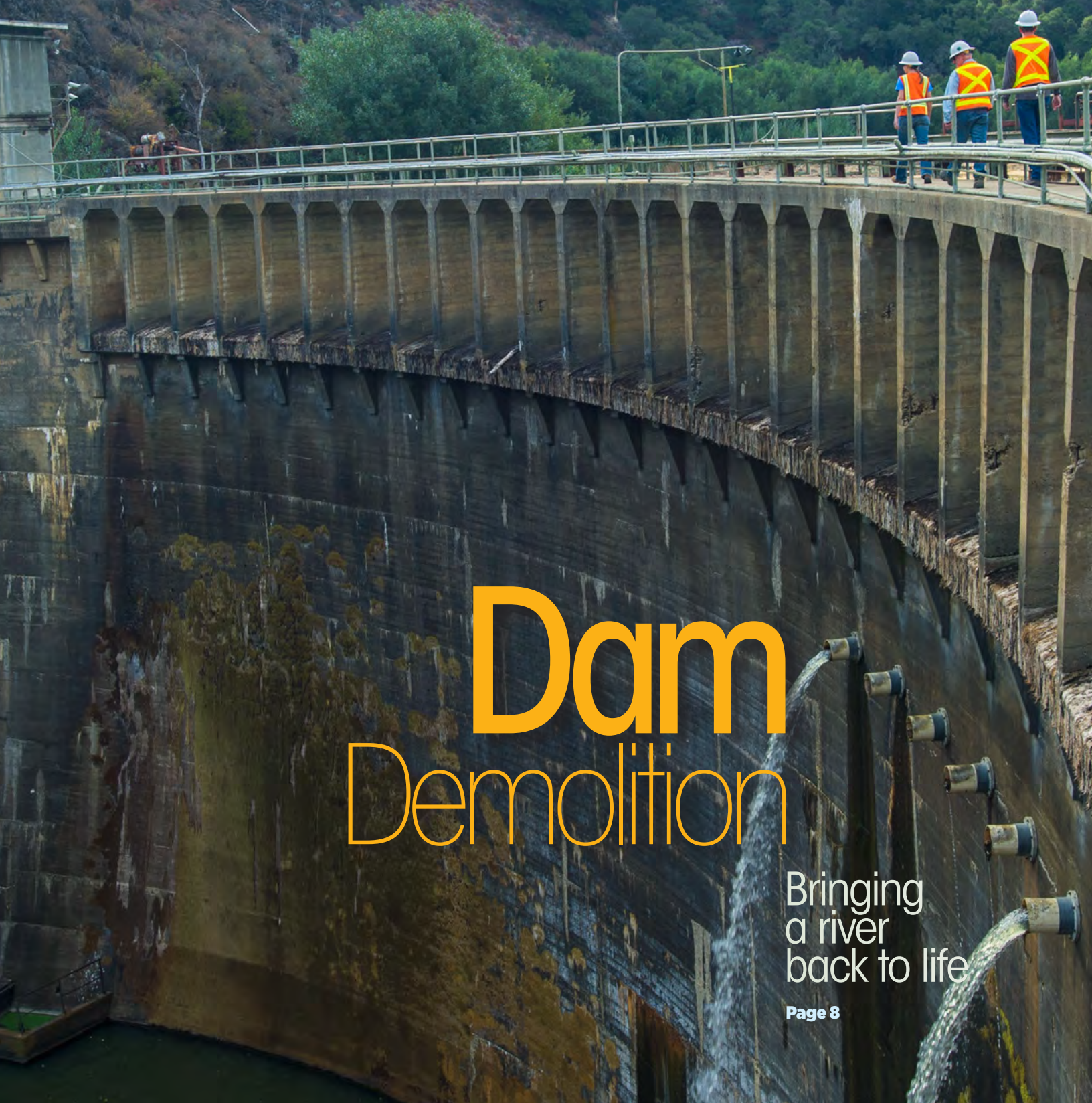




WINTER 2013|2014

a magazine from the  
California Department of  
Water Resources



# Dam Demolition

Bringing  
a river  
back to life

Page 8



# Taking Action

**I**n my career I've learned that it is vital to continually review business processes, find potential enhancements and take action based on those findings. Similarly, as the State Water Project (SWP) has developed over the last 50 years, and we have faced, as well as solved, many challenges. Those challenges have been in many diverse areas, but applying sound solutions to complex problems always has been at the core of the DWR's culture. There are a number of areas where many of you are taking large steps forward in continuing to keep DWR the world-class organization that it is today.

**Safety:** First and foremost is the DWR Safety System. Safety and security needs have evolved over time with technological advancements and increased understanding of potential threats. The Department has hired a new Safety Officer, reporting to Executive, who is integrating and standardizing the Safety System department-wide. Our goal is to develop and continually nurture a world-class safety organization.

**Workforce and Resources:** Every person who works for DWR plays an important role in fulfilling its mission and goals. We are dedicated to developing and sustaining a well-trained and experienced workforce. Our ongoing goals include developing staff and succession planning as well as classification alignment and organizational refinements to support the needs of the DWR. Additionally, we are taking action to identify and address inequities.

**Compliance:** The challenge of balancing environmental stewardship and evolving regulatory requirements with conveying water has grown exponentially. At the same time, new energy reliability standards, along with a growing emphasis on renewable energy and the need to adapt California's water management strategies to climate change, have added layers of complexity.

**SWP Flexibility and Reliability:** Ensuring flexibility and reliability in water supply and delivery to benefit the people and environment of California is a major objective of the SWP. To this end, there are a number of ways the SWP is assessing, refining, managing, adapting and taking action. Development of the Condition Assessment Programs and the Integrated Resource Plan will assist in paving the way for strategic action. Additionally, a high-profile initiative under way that will greatly improve flexibility and reliability of the SWP is the replacement of the River Valve Outlet System at Hyatt Pumping Plant in Oroville.

**Financial Management:** Ensuring affordability and sound financial management through delegation of authority, accountability, cost effectiveness and transparency is at the forefront of recent initiatives. Implementation of Program

Control Statements and standardizing program management practices has strengthened our approach. In addition, the long-term water supply contract extension process will lead to more defined financial practices between DWR and the SWP Contractors.

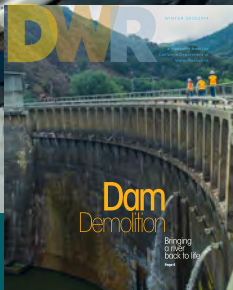
Operation of the SWP is getting more complex, and DWR is responding with professionalism and perseverance. The commitment to improvement and excellence that has long characterized the work of DWR will help us meet our ongoing and future challenges. 💧

Carl A. Torgersen,  
*Deputy Director*





# What's INSIDE



*Statewide Drought Emergency. . . see page 6*

## On the Cover:

With ground breaking for the dismantling of the San Clemente Dam in June of 2013, DWR's Division of Safety of Dams staff oversee California's largest dam removal project.

## Photo above:

At DWR's first snow survey on January 3, 2014 after ending calendar year 2013 with the lowest rainfall amounts on record, Frank Gehrke, Chief of California's Snow Surveys, performs snow survey finding snowpack's water content is about 20 percent of normal for this time of year.

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Edmund G. Brown Jr.  
*Governor*

John Laird  
*Secretary for Natural Resources*

Mark Cowin  
*Director, Department of Water Resources*

Nancy Vogel  
*Assistant Director, Public Affairs*

---

Maggie Macias, *Editor*

*Contributing Writers*

Doug Carlson • Kristin Honeycutt  
Jennifer Iida • Christina Jimenez • Jeanine Jones  
Brian Moniz • Saunthy Nicolson-Singh  
Cait Plantaric • George Qualley • Elizabeth Scott  
Ted Thomas • Deena Terao • Sean Walsh

*Design*

DWR GRAPHIC SERVICES  
Bob Peterson • Scott Olling

*Photography*

DWR PHOTOGRAPHY UNIT  
John Chacon • Florence Low  
Paul Hames

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or story ideas to:

DWR Magazine  
Public Affairs Office  
Department of Water Resources  
1416 Ninth Street, Room 252-21  
Sacramento, CA 95814

Email:  
dwrpeople@water.ca.gov  
Phone: (916) 653-8743



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# Key Link

## Edmonston Pumping Plant Marks Four Decades

**E**dmonston Pumping Plant dramatically links Northern and Southern California by pumping State Water Project water nearly 2,000 feet up the Tehachapi Mountains for delivery to Los Angeles and other points across the divide.

One of the State Water Project's (SWP) many marvels, Edmonston is named for former State Engineer and Division of Water Resources Chief (1950-55) A.D. Edmonston, a key figure in California water planning.

The largest SWP pumping plant, Edmonston powers one of the highest water lifts in the world. The plant's 14 units, laid out in a U-shape nearly as long as a football field, can pump close to two million gallons a minute through 10 miles of tunnels and siphons crossing the rugged

Tehachapis. Each pump weighs more than 400 tons and is powered by 80,000 horsepower motors. Edmonston, located in Kern County, utilizes 40 percent of all electricity used by the SWP.

(In photo at top) Governor Ronald Reagan dedicated Edmonston when it began operation in 1971. The plant was completed in 1973. 💧





# Features

## Bay Delta Conservation Plan Released for Public Review

**Comprehensive plan helps restore Delta's ecosystem and secure reliable water supplies for California.**

by Nancy Vogel

After seven years of hard work and analysis, DWR and its federal and State partners on December 9 released for official public review the 9,000 page Bay Delta Conservation Plan. A 25,000-page Environmental Impact Report/Environmental Impact Statement—one of the most complex ever undertaken—also was released for a 120-day public comment period.

Release of the documents marks an important milestone in the steady progress of the plan. One of the plan's 22 major elements—construction of new intakes and tunnels in the Sacramento-San Joaquin Delta—would amount to the biggest change to the State Water Project (SWP) since its construction 50 years ago.

The plan seeks to fulfill the dual goals set forth by the California Legislature in 2009: Providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem.

Release of the plan for public review triggered criticism from opponents of the plan, especially in the Sacramento-San Joaquin Delta, where residents are understandably

concerned about the effects of construction and new infrastructure. Days after its release, more than 100 opponents rallied on the steps of the Capitol to protest. But others welcomed the progress on the BDCP.

"The Brown administration's 34,000-page draft plan represents the most comprehensive effort in a generation to fit the scientific, engineering and political pieces together in order to allow Californians to adapt to climate change while sustaining both the environment and the economy," wrote the Los Angeles Times editorial board.

To the north, the San Francisco Chronicle editorial board called the plan "a solid start" for California's water future and noted that the plan would likely improve environmental flows through the Delta.

The Bay Delta Conservation Plan offers a more comprehensive approach to protecting multiple endangered and threatened species in the Delta than the single-species focus of the past, which has failed to lead to the recovery of native fish species including the delta smelt. The 50-year term of the plan

offers the customers of the SWP and the federal Central Valley Project a stable regulatory framework. The plan would not necessarily increase the volume of water delivered to 25 million people and three million acres of farmland by the SWP and the federal Central Valley Project, but a new Delta conveyance system and extensive habitat restoration could help to reverse the trend of declining fish populations and therefore stabilize water deliveries.

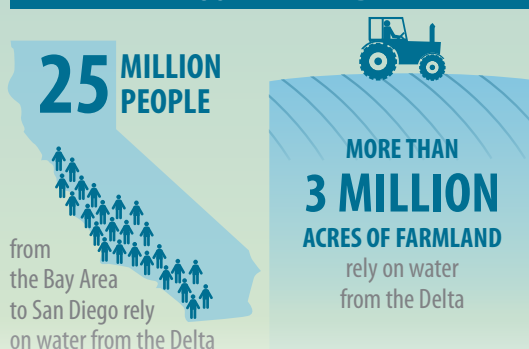
The public review draft reflects changes made since the administrative drafts of the plan and its accompanying EIR/EIS were released in the spring and summer of 2013. Those changes include a shift in the alignment of proposed tunnels to avoid disruption of Delta communities and more detail about how the plan would be governed.

Public meetings in which people can submit comments on the plan took place in a dozen towns and cities across California in January and February.

"We're looking forward to a robust public comment period," said DWR Director Mark Cowin. ♦

## WHY the BDCP is important for California

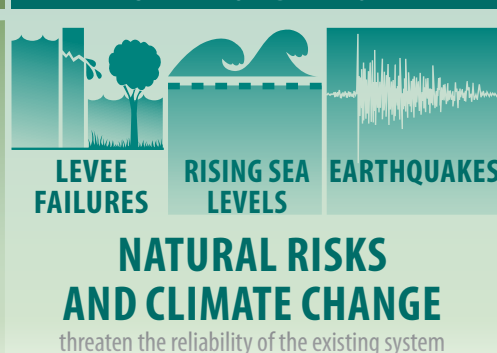
### WATER SUPPLY RELIABILITY



### ECOSYSTEM RESTORATION



### CLIMATE RISK ADAPTATION





# WATER

# 2

## California IN A Drought State Water Project Allocations at Zero

By Jeanine Jones, DWR Interstate Resources  
Manager & Deputy Drought Manager

Water years 2012 and 2013 were dry statewide, especially in parts of the San Joaquin Valley and Southern California. Water year 2014 has to date been tying or setting records for dryness through the latter part of January. Precipitation in the northern and southern Sierra Nevada reached new lows and low stream flow records have been set even in normally wet locations such as the North Coast. The mountain snowpack that would normally provide spring and summer runoff to refill reservoirs is notable for its absence.

On average, about half of California's statewide precipitation occurs in December, January, and February, with only a handful of large winter storms accounting for the difference between a wet year and a dry one. With two-thirds of the wettest part of winter now behind us, conditions are looking increasingly bleak. The probability of ending up the season with a normal water year is low. Moreover, DWR's late November experimental seasonal forecast for the water year called for mostly dry statewide conditions this season.

Federal, State, and local water projects that rely on runoff from the Cascades and the Sierra—the source of most of California's developed water supply—will be operating under unprecedented dry conditions this summer, and will be challenged to manage their systems to conserve vital reservoir storage. On January 31, 2014, DWR announced zero allocation to all 29 public water agencies for the first time in the 54-year history of the State Water Project. Statewide reservoir storage going into our wet season was about 75 percent

of seasonal average, and has now dropped to about 65 percent of average. Impacts of multiple dry years on statewide groundwater levels are also evident. The largest groundwater level declines—in excess of fifty feet—have been observed in the southern part of the San Joaquin Valley.

Drought conditions and impacts vary greatly across a state the size of California. Impacts are normally felt earliest by those relying on unmanaged water supplies, such as ranchers relying on dryland grazing or private homeowners and small water systems dependent on fractured rock groundwater sources. Experience teaches us that notable impacts of present drought conditions can be categorized as:

### Health and safety and economic

*Risk of catastrophic wildfires, as experienced in Southern California in 2003 and 2007*

### Health and safety

*Drinking water supply impacts to small water systems (and private well owners) on unreliable fractured rock groundwater sources in rural areas*

### Environmental

*San Joaquin Valley's continued land subsidence, affecting water supply and flood protection facilities, impacts to salmonids*

### Economic

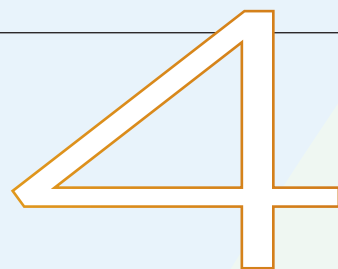
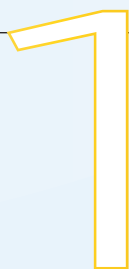
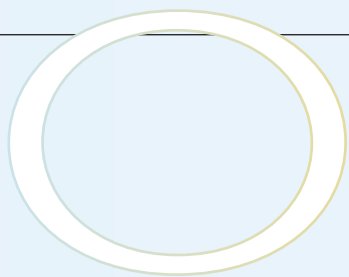
*Loss of rangeland carrying capacity and minimal water allocations to some agricultural water users, especially in the San Joaquin Valley*

(Above) Lake Oroville at low level in January 2014 due to dry conditions.

(Right) Governor Brown (center) signs drought proclamation on January 17, 2014.







Recognizing potential implications of continuing dry conditions, Governor Edmund G. Brown Jr. initially issued an Executive Order in May that directed DWR and the State Water Resources Control Board (SWRCB) to expedite and facilitate processing of one-year water transfers, and additionally directed DWR to coordinate State Water Project (SWP) operations to alleviate critical impacts to San Joaquin Valley agriculture. On December 17th, the Governor directed DWR, SWRCB, the Department of Food and Agriculture and the Office of Emergency Services to convene an interagency Drought Task Force to review expected water project allocations, our state of preparedness, and whether conditions warrant declaration of statewide drought. The Governor subsequently issued a drought proclamation of emergency on January 17th. Measures in the proclamation included:

- State agencies, led by DWR, are to execute a statewide water conservation campaign building upon the existing Save Our Water campaign, and local agencies to implement their water shortage contingency plans.

- SWRCB is to consider petitions for consolidation of places of use for the State Water Project and Central Valley Project, which could streamline water transfers and exchanges between water users.

- SWRCB is to put water rights holders across the state on notice that they may be directed to cease or reduce water diversions based on water shortages.

- SWRCB is to consider modifying water quality control plan rules that require the release of water from reservoirs so that water may be conserved in reservoirs to protect cold water supplies for salmon and maintain water supplies.

- DWR is to evaluate drought impacts on groundwater basins, land subsidence and agricultural land fallowing. 💧

## Ways to Save

### Inside your home

#### KITCHEN

- Wash vegetables in container, not under running water.
- Use dishwasher for full loads only.
- Replace old dishwashers with water and energy efficient dishwashers



#### BATHROOM

- Install low-flow shower heads.
- Take shorter showers. (Showers kept under 5 minutes can save you about 15 gallons per shower.)
- Turn water off when brushing teeth and soaping hands



#### LAUNDRY ROOM

- Use washing machine for full loads only.



### Outside your home

#### LANDSCAPE

- Irrigate your yard in the morning or evening when temperatures are cooler.
- Choose water efficient irrigation system such as drip irrigation for your trees, shrubs, and flowers.
- Plant drought-resistant trees and plants.



#### CLEANUP

- Use broom to clean driveways sidewalks, patios and walkways.
- Wash cars/boats with a bucket, sponge, and hose with self-closing nozzle.



#### ACTIVITIES

- Install a pool/spa cover to reduce evaporation and filter backwash.
- If draining a pool is necessary, find a use for the water.
- Check your pool and pool plumbing for leaks.



For more tips, visit:  
[www.SaveOurH2O.org](http://www.SaveOurH2O.org)





*(Left to Right) Safety of Dams Geologist Robert Burns, Senior Engineer Erik Malvick and Engineer Kristen Martin view the San Clemente Dam and Carmel River during field explorations in the fall of 2013.*





# Taking It All Down

By Christina Jimenez

## California's largest dam removal project is under way in Monterey County under the supervision of DWR's Division of Safety of Dams (DSOD).

DSOD agreed with the plan to remove the 106-foot-high San Clemente Dam on the scenic Carmel River after a study determined the dam seismically unsafe.

The concrete dam removal project will open upriver spawning grounds to steelhead trout and restore habitat for red-legged frogs, in addition to protecting people and homes downstream from possible dam failure.

Sediment fills 90 percent of the reservoir behind the 92-year-old dam, making removal an especially tricky process.

"We have a two-pronged responsibility with the San Clemente Dam removal project," said Daniel Meyersohn, a Supervising Engineer with DSOD's Design Engineering Branch. "Since it is a dam under DSOD's jurisdiction, and the owner has chosen to remove the dam, we have to approve of the way in which the dam will be removed. Our second responsibility is serving as the lead agency for the California Environmental Quality Act (CEQA)."

"Since the dam owner (California American Water) is not a public agency, and DSOD's seismic safety permit is the largest and most critical permit of this project, the Department—by default—became the State lead agency for developing the





**(Left to Right)** Erik Malvick, Robert Burns and Kristen Martin review the geotechnical investigation plan.

EIR/EIS (Environmental Impact Report/Environmental Impact Statement). The United States Army Corps of Engineers served as the federal lead agency for the EIR/EIS,” said Charyce Hatler, Senior Environmental Scientist Specialist with DWR’s South Central Region Office.

Environmentalists are excited that removal of the dam may aid recovery of South-Central California Coast steelhead by opening up more than 25 miles of spawning and rearing habitat for the anadromous fish. And red-legged frogs, whose numbers also have been declining, may rebound with new habitat.

Actual demolition of the dam is scheduled for October 2015, but the groundbreaking for the complex, \$84 million project was held in June 2013. California American Water, the State of California and the Federal government are together funding the dam removal.

“DWR staff including environmental specialists, attorneys and engineers, have worked very hard over the years to complete this project, especially with the CEQA process,” said Chief of Safety of Dams David Gutierrez. “This is not a typical Dam Safety project and is actually very unique worldwide.”

### Seismic and Flood Risk

DSOD confirmed the dam was seismically unfit after asking the owner to evaluate its ability to withstand a “Maximum Credible

Earthquake” and a “Probable Maximum Flood.”

Two main issues were identified. “In the wake of an earthquake from the nearby Tularcitos Fault, the dam may be overstressed and crack, which could lead the dam to collapse,” said Meyersohn. “The safety of the people living downstream of the dam is at risk.”

Research also confirmed the dam’s spillway, which is capable of releasing 22,800 cubic feet per second at the dam’s highest elevation, is not large enough to withstand a major storm.

“With full reservoir storage, the dam’s spillway will not be able to contain all the water in the event of a big storm,” said Richard Olebe, a Senior Engineer with DSOD’s Design Engineering Branch. “The water would overtop the dam, cause erosion and then lead to a failure.”

### Rerouting the River

Of the four alternatives proposed by California American Water in 2005 to resolve the seismic issue, the dam owner chose to reroute the Carmel River and remove the San Clemente Dam.

“This is truly a unique case because of the amount of sediment that has accumulated behind the dam since it was built,” said Meyersohn.

Originally designed to store 1,425 acre-feet of water, the reservoir today can hold only an estimated 100 acre-feet of water. The substantial amount of silt takes up more than 90

percent of the original reservoir capacity.

In addition, one creek and one river converge at the dam. The removal of the dam must take into consideration the sediment that fills the San Clemente Creek and Carmel River.

The plan outlines rerouting the Carmel River about half a mile upstream from the dam by creating a diversion channel connecting the Carmel River to San Clemente Creek. Approximately 830,000 cubic yards of sediments accumulated in the San Clemente Creek Valley will be excavated, hauled and disposed of on the Carmel River arm. The sediments will then be stabilized with massive retaining rockfill buttresses on each end. With the implementation of mitigation measures, the area will blend naturally with the environment.

“We do not want the sediment to run downstream and cause flooding or choking of the channel,” said Olebe, the DSOD veteran who has worked with the Design Engineering Branch for 18 years. “This is why we are asking them to move the sediment first—put it to the side—and when we all agree that the sediment will never go down the stream, we will allow them to take the dam out.”

“Our responsibility is to protect the public now, and to make sure that once the dam is removed anything left behind—



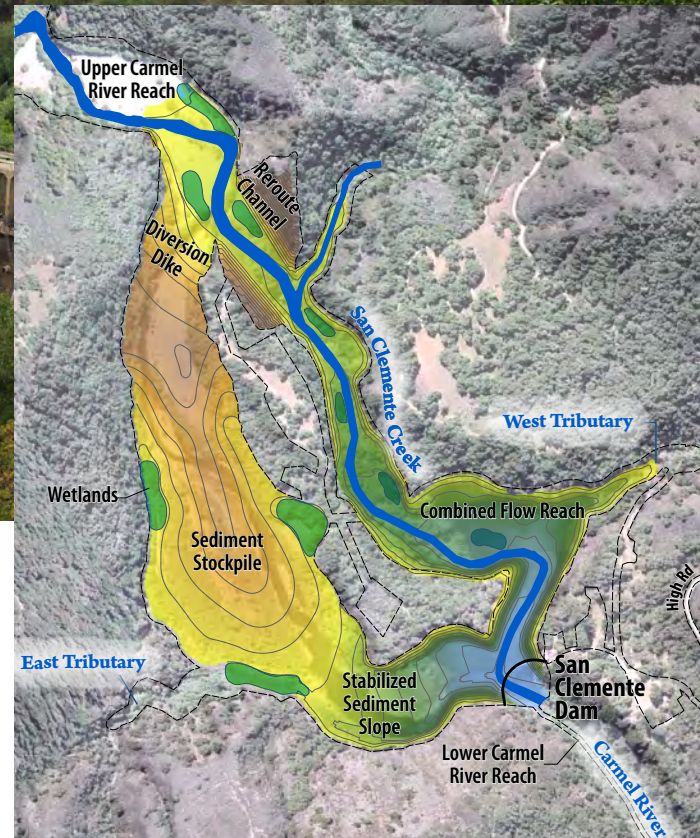
**(Right)** During geologic drillings at San Clemente Dam, contractors inspect soil from a boring.



This is not a  
*typical* Dam Safety project and  
**is very unique worldwide.**

—David Gutierrez, Chief of Safety of Dams

At the Carmel River arm of the reservoir, the dewatered reservoir behind San Clemente Dam shows sediment that fills 90 percent of the reservoir and must be stabilized before dam removal.



Map prepared by URS Corporation for California American Water and the California State Coastal Conservancy.

whether it is a channel or sediment—is safe to the public,” said Olebe.

### Field Exploration

The field exploration phase of the project was completed in the fall of 2013. A DSOD team of two Senior Engineers and two geologists visited the project site weekly to ensure all measurements and samples would provide adequate information for project design.

“It was our job to pay attention to any and all information they gathered, and how they collected that information, because we are going to use those findings to evaluate their design,” said Olebe.

Work on reservoir sediment is especially complicated because the sediment is soft and weak.

Now that field exploration is complete, DSOD engineers and geologists are reviewing all plans and specifications for the removal of the dam, including diverting the Carmel River and relocating the sediment.

### Environmental Impact Analysis

The San Clemente Dam Seismic Safety EIR/EIS, a set of public disclosure documents well over 1,000 pages, details all environmental impacts of the project, including the planning, construction, operation, maintenance and how the project will be used.

The San Clemente Dam Seismic Safety Project Final EIR/EIS was certified in December of 2007. In 2012 and 2013, an EIR Supplement and Addendum were released.

“The most important part about preparing the San Clemente Dam removal CEQA document was that we built not only a team internally, but with external agencies and the community as well,” said Hatler, who worked closely with DSOD and other agencies leading the completion of the CEQA document. “We made sure we in-

cluded the correct information in the EIR/EIS and the other CEQA documents, not only for our own decision makers but also so the public and agencies would have an accurate picture of this project.”

The San Clemente Dam EIR is available at [www.water.ca.gov/pubs/safety/dams/final\\_supplemental\\_eir\\_san\\_clemente\\_dam\\_seismic\\_safety\\_project/san\\_clemente\\_dam\\_final\\_seir\\_july\\_2012.pdf](http://www.water.ca.gov/pubs/safety/dams/final_supplemental_eir_san_clemente_dam_seismic_safety_project/san_clemente_dam_final_seir_july_2012.pdf) ♦



# Easing an Upstream Battle

## Caprini Fish Passage Improvement Project

By Jennifer Iida

The quiet calm at Caprini Orchards along Mormon Slough was replaced with a flurry of activity last fall when crews cleared the way for easier passage to upstream spawning habitat for adult Chinook salmon and steelhead at the Caprini Low-water Crossing near Stockton.

“The DWR Fish Passage Improvement Program (FPIP) did the design work and hydraulic modeling,” said Randy Beckwith, DWR Senior Engineer with the FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO). “Basically, we took a perched concrete dam out of the channel and replaced it with a bridge, reforming the channel bottom into a more gradual gradient so the fish will have a much easier time navigating the site.”

The Caprini Crossing, located 13 miles upstream of the confluence of the Calaveras River with the San Joaquin River, was a concrete roadway that spanned the channel bottom and contained three undersized

culverts. DWR fish passage engineers redesigned the crossing to still serve as a bridge for the owners, while improving fish passage by using three 10-foot-high by 12-foot-wide box culverts.

The former crossing was somewhat of an antique. It was built in the 1920s by the grandfather and father of current land owner Vince Caprini. They installed three 36-inch-diameter corrugated metal culverts in a concrete road structure that could pass lower flows without overtopping the road. The crossing, used by Vince Caprini to reach his orchard and by San Joaquin County for flood channel maintenance activities, now benefits fish passage, improves the capacity of the culverts and lowers the water surface elevation at higher flows.

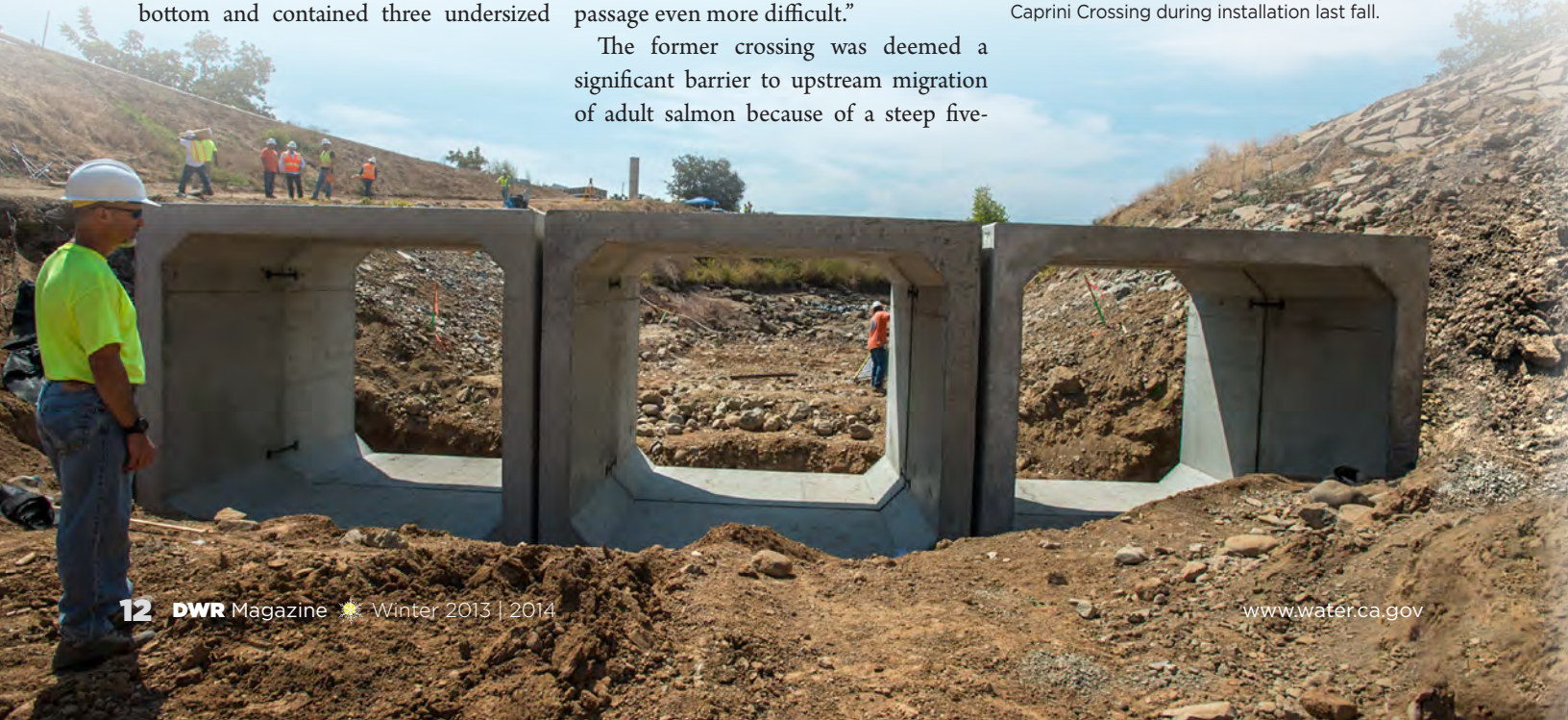
“The channel degraded below the former crossing and riprap was added to armor it so it would stay put,” said Beckwith. “But over time that made fish passage even more difficult.”

The former crossing was deemed a significant barrier to upstream migration of adult salmon because of a steep five-

foot-drop over the riprap downstream, high water velocities through the metal culverts, and shallow water depths over the road surface at moderate flows.

In FPIP’s 2007 Calaveras River Fish Migration Barriers Assessment Report, the Caprini crossing was one of the highest priorities for remediation of the 97 instream structures assessed by FPIP scientists and engineers. They analyzed impacts to steelhead and fall-run Chinook salmon migration in the lower Calaveras River system. The construction of a roughened channel fishway at the Budiselich Flashboard Dam site in 2011 was the first fish passage improvement project completed by FPIP in the system, in partnership with Stockton East Water District (SEWD), the U.S. Fish and Wildlife

**(Left)** Randy Beckwith, Senior Engineer with DWR’s FloodSAFE Environmental Stewardship and Statewide Resources Office, inspects new Caprini Crossing during installation last fall.





Service and the California Department of Fish and Wildlife.

The same partners, along with the Caprini family, collaborated on the latest project. FPIP engineers Trevor Greene, Colin Hanley and Randy Beckwith worked on the design and hydraulic modeling, and oversaw construction, while SEWD coordinated the overall project and permitting, and their crews constructed the new crossing.

"We have a very strong relationship with our partners and that is going to help DWR on other projects in the future," said Marc Commandatore, FPIP Senior Environmental Scientist. "It's an honor to have outside agencies come to DWR and ask for our fish passage expertise, and this project is a great example of how we integrate science and engineering with different agencies and how we work together to get the job done."

Situated in the Mormon Slough flood control channel of the Calaveras River system, the Caprini crossing also had to meet San Joaquin County's strict flood control requirements. Hydraulic modeling completed by FPIP engineers confirmed that the project does not negatively affect water surface elevations in the channel.

"The goal was to not raise the water surface level at high flows while aiming to improve fish passage at the site," said Trevor Greene, the DWR FPIP Engineer who led the hydraulic modeling on this project.

The improved crossing will also greatly reduce erosion, meet fish passage criteria above a minimum flow of 30 cubic feet per second, and reduce water surface elevations upstream of the project for the 100- and 200-year flows.

"After completing the projects, it's very gratifying to go out there now and to see the hydraulic improvement at different flows and to see salmon passing," said Greene.

"I am proud that we have created an environmentally sustainable structure that meets everyone's objectives," said Ted Frink, DWR Environmental Program Manager II in FESSRO. "This is one of the latest examples of DWR working with local agencies and owners to develop integrated environmental and engineering solutions that address flood conveyance and public safety, and protect public trust resources like Chinook salmon and steelhead populations in our river systems."

Funding for DWR's role in the improvement project came from Proposition 50 and Proposition 84.

The Calaveras River Fish Migration Barriers Assessment Report, which provides an overview of structures in the Calaveras River system that may be barriers to migrating steelhead and salmon, is found at [http://www.water.ca.gov/fishpassage/docs/calaveras/calaveras\\_assess.pdf](http://www.water.ca.gov/fishpassage/docs/calaveras/calaveras_assess.pdf)

The Budiselich Flashboard Dam Fish Passage Improvement Project is found at [http://www.water.ca.gov/fishpassage/projects/calaveras\\_budiselich.cfm](http://www.water.ca.gov/fishpassage/projects/calaveras_budiselich.cfm)

The Fish Passage Improvement Program website can be found at <http://www.water.ca.gov/fishpassage/> 💧



## HOW TO IMPROVE fish passage

(Above)  
Original Caprini  
Crossing built  
in the 1920s.



New Caprini  
Crossing  
construction  
begins in  
September of 2013.

### Step 1



DWR's Caprini  
Project Manager  
Randy Beckwith  
checks culverts.

### Step 2



Caprini Crossing  
completed by  
early October  
of 2013.

### Step 3



# The Path for Climate Change

By Christina Jimenez

In a room full of fellow scientists, DWR's Michelle Selmon delivered an update on the Department's response to climate change at the 21st Annual Environmental Scientist Workshop.

"Water deliveries were a big focus at DWR when I started as a Student Assistant in 1994," said Selmon, a Senior Environmental Scientist Specialist, tying in her presentation to the workshop theme "Yesterday, Today and Tomorrow." "The Department's focus has evolved greatly today—including a clear rise in the emphasis on sustainability and climate change—and I am pleased to be a part of it."

Finalizing phase two and three of the Climate Action Plan (CAP), incorporating new climate change content into the California Water Plan 2013 update, and assisting with Integrated Regional Water Management Plan updates are high priorities for DWR's 12-member climate team.

"We want to be ahead of the game when it comes to climate change," said Selmon of the Division of Integrated Regional Water Management's (IRWM) South Central Region Office (SCRO) in Fresno. "Climate change management is one of DWR's five core values, along with workplace safety, sustainability environmental stewardship and environmental justice."

## Mitigating and Adapting to Climate Changes

The Department-wide Climate Action Plan (CAP), now underway, is being developed in an effort to reduce the Department's impact on the environment, as well as to prepare for current and future climate change.

The first phase of the CAP, the Greenhouse Gas Emissions Reduction Plan (GGERP), was completed in May 2012. The GGERP details the Department's current greenhouse gas (GHG) emissions and lays out a plan to meet the aggressive reduction targets set by the State.





**(Left to Right)** Michelle Selmon, Senior Environmental Scientist on DWR's Climate Action Team, speaks about "What's New on the Climate Change Front?" Division of Environmental Services Chief Dean Messer and Deputy Director Paul Helliker welcome more than 200 DWR environmental scientists to the 21st DES Conference.



Phase two will identify a framework for climate change data and analysis.

"When we looked at how climate change has been analyzed to date, many programs have analyzed it quite differently," said Selmon. "Thus, we are working on providing guidance on the best ways to conduct the analysis, as well as developing a portal where all the data can be accessed. This will give staff a framework for climate change analysis, and improve standardization and quality across the Department."

In phase three, the Vulnerability Assessment and Adaptation Plan will identify the vulnerabilities to climate change that could affect DWR staff, facilities and operations. Staff will assess risks, develop adaptation goals and objectives, and devise a plan to increase resilience.

"To date, strategic maps have been developed to highlight DWR infrastructure alongside areas that may have heightened sea level rise, wildfire and/or flood risk, due to climate change," said Selmon. "We'll also look at extreme heat impacts, as well as hydrological changes that will affect our water supply."

### Climate Change and the California Water Plan

DWR climate staff is also working on a new climate change analysis for the 2013 California Water Plan update.

"The new climate change sections in the 2013 California Water Plan update will be much more detailed than the 2009 update," said Selmon. "Climate change will be incorporated into all Resource Management Strategies and Regional Reports."

The climate change analysis in the 2013 update will include projections of future demand and supplies, as well as adaptation, mitigation and water-energy nexus content.

### A Resource for Regional Water Managers

Working closely with regional water managers to incorporate climate change considerations into their planning efforts is another top priority for the climate team.

"Integrated Regional Water Management (IRWM) groups are required to plan for how they will manage their resources in the future, and recognize that climate change will be a big factor. To be eligible for Proposition 84 grant funding through

DWR, they must assess their vulnerabilities to climate change, as well as their greenhouse gas emissions, and include the analyses in their IRWM plan," said Selmon. "We assist them by providing guidance and resources."

Members of DWR's climate team review drafts of IRWM plans, provide input on technical advisory groups, and deliver presentations at IRWM meetings. 💧

## Gaining a Broader Perspective

The Department's 21st Annual Environmental Scientist Workshop, themed "Yesterday, Today and Tomorrow," corralled more than 200 DWR environmental scientists from around the state in a vintage fruit packing shed in Loomis, California.

The event featured more than 40 speakers, addressing a wide variety of environmental topics, including conservation strategies, meadow restoration and fish passage.

DWR Director Mark Cowin, Deputy Director Paul Helliker and Environmental Services Division Chief Dean Messer kicked off the event, delivering promising messages to the scientists and encouraging them to continue to take a cutting edge approach in their work.

"It's not just the quality of the science, but it's about how we go about doing it," said Cowin. "How we relate to those agencies, stakeholders and interest groups along the way is what really makes a difference. We

need people who are able to work with others, because the way we conduct ourselves is just as important as the work we produce."

Cowin emphasized the importance of human relations among the scientists, and their roles as ambassadors in developing a framework for the science.

"It's the day-to-day staff communications that is going to make a difference," said Cowin. "I know we have great scientists who are great diplomats."

The three-day workshop provides DWR environmental scientists a chance to share their views and approaches to work-related obstacles.

The first annual workshop began in 1991, under DWR's first Chief of Environmental Services, the late Randy Brown. Approximately 50 speakers and scientists participated.







# Shari

## Advancing Integrated Water Management at the Regional Level

In the last decade, great investments of public funds have been made to advance integrated water management at the regional level, thanks to bond measures Proposition 50 and 84. The return on that investment also has been tremendous. Today, there are 48 established regional water management groups in California, representing 87 percent of the State's area and 99 percent of the population.

With guidance and support from DWR, the regional groups have invested their own time and resources to leverage grant funds. They've built partnerships, collaborated to develop common visions and strategies, prepared comprehensive integrated regional water management plans (IRWMPs) and initiated or completed innovative multi-faceted water resources projects to deliver multiple benefits to their region and the State.

Two successful IRWM projects include the completion of the Morris Dam Water Quality Enhancement project in Southern California and the work of the Westside Sacramento regional group in North Central California. ♦

**Since 2002**, nearly \$580 million in state funding has been matched by over \$2.8 billion in local funding to implement integrated regional water management projects which provide multiple benefits to communities throughout the state.

**\$577**

**State Investments (\$ Million)**  
Prop 50 and Prop 84  
(Round 1) via IRWM grant Programs

**\$2,840**

**Local (Non-State)  
Cost Match  
(\$ Million)**



**(Above) Morris Dam (Left to Right)**  
At the ribbon cutting ceremony for Morris Dam Water Supply Enhancement Project, Ed Vizcarra of the Planning and Public Works Deputy Office of LA County Supervisor Michael D. Antonovich, DWR Southern Region Office Chief Mark Stuart, Executive Watermaster Tony Zampielo California State Senator Dr. Ed Hernandez, O.D. and Assistant Director of Los Angeles County Department of Public Works Mark Pestrella open the 72-inch valve to release water down the San Gabriel River. (Photo courtesy of Los Angeles County Public Works Department)





# A Common Vision

## A Showcase of Value in the San Gabriel Mountains

By Brian C. Moniz

In July of 2013, DWR Southern Region Office Chief Mark Stuart joined elected officials, water managers from Los Angeles County, the cities of Torrance and L.A., and members of the Morris family at the dedication ceremony for the Morris Dam Water Supply Enhancement Project in the San Gabriel Mountains. The three-year project was made possible by a \$5.1 million grant from DWR's Proposition 50 IRWM Grant Program to leverage \$5.5 million in local funding. A key project identified in the 2006 Greater Los Angeles County (GLAC) Integrated Regional Water Management (IRWM) plan, it demonstrates the value of using an integrated water management approach and delivering return on the public's investment to solve water resources problems in the State.

Morris Dam is part of a trio of dams on the upper reaches of the San Gabriel River that capture storm water runoff for release to groundwater recharge facilities downstream. Anchored into the steep canyon walls of the San Gabriel Mountains, Morris Dam stands as one of the earliest surface water storage development projects in California history.

Like most dams built in the early 20th Century, Morris Dam's primary purpose was water supply storage. It also served the San Gabriel Valley as means to control the storm flows and flooding from the San Gabriel River. However, over time, the accumulation of river sediment in the reservoir behind the dam reduced the storage capacity and compromised the functionality of the dam outlet works. In 2006, the GLAC regional water management



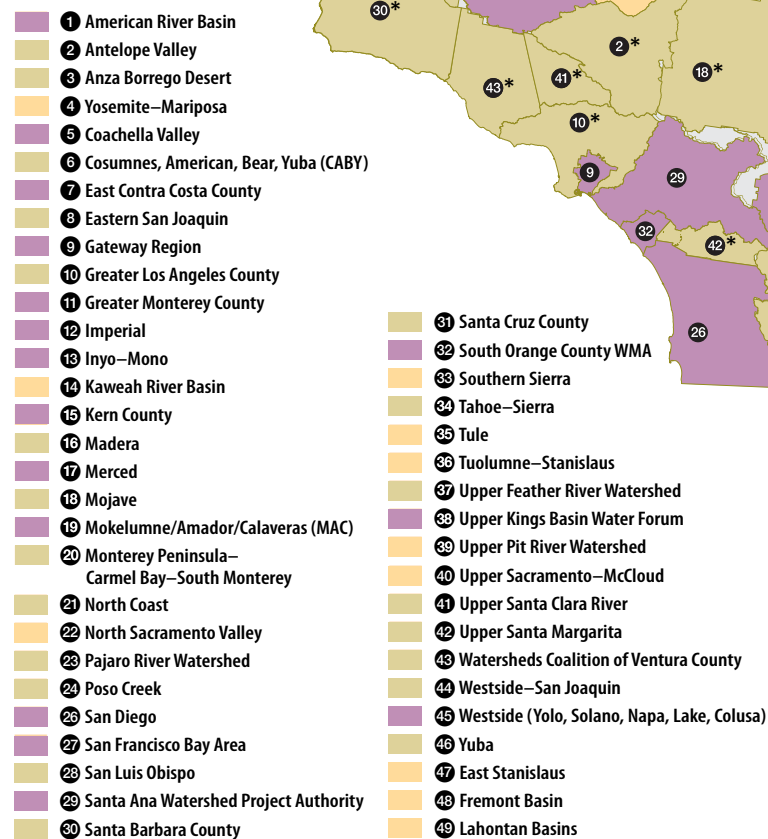
group recognized that increasing the capacity of the reservoir by modifying the dam would provide an additional blend of water supply and flood protection benefits to the Region, meeting the goals of IRWM.

Modifications to the 245-foot-high and 800-foot-wide structure include newly coated penstocks, upgraded valves, automated technology and a new control house. These upgrades at Morris Dam along with the complex flood management and groundwater recharge facilities throughout Los Angeles County allow the Flood Control District to replenish about 220,000 acre-feet of water a year to groundwater basins. That's equivalent to the amount used by a half-million families in Southern California each year, according to Mark Pestrella, Assistant Director of the Los Angeles County Public Works Department.

Mark Stuart had an opportunity to speak at the ribbon cutting ceremony and stated "I remember in the early days of forming the Greater Los Angeles County IRWM Group, there was a lot of distrust and animosity—we've come a long way since then." He pointed down the river canyon and went on to say, "Sometimes we forget, we've got 10 million people out there depending on us to supply them with water."

"My experience working with this group has been very positive," said Tanya Meeth, DWR Project Manager for the project. "The project achieved its objectives, and was completed under budget. They were responsive, timely with required deliverables, and accommodating with scheduled project site visits." 💧

## IRWM Coverage & Plan Status





# Water Resources Management for the Westside Sacramento

By Kristin Honeycutt

The Westside Sacramento Integrated Regional Water Management (IRWM) Group (Westside Group) recently completed its IRWM Plan (IRWMP) for managing water resources within Lake, Yolo, Napa, Solano, and a portion of Colusa counties through 2035.

The Westside Group is involved with many of the State's critical initiatives to improve management of water resources within its region, such as the Bay Delta Conservation Plan (BDCP), the Central Valley Flood Protection Plan (CVFPP) and other statewide and regional surface water and groundwater management programs. Through its IRWM planning efforts, the Westside Group aligns its projects to complement state operations in the area.

The Westside Group, created in 2010, consists of Lake County Watershed Protection District, Napa County Flood Control and Water Conservation District, Solano County Water Agency, Water Resources Association of Yolo County and Colusa County Resource Conservation District. Covering a vast area of more than

1.9 million acres, with varying levels of water management infrastructure, the region includes 90 entities with water resource management responsibilities, serving a population of 390,000.

The Westside IRWM region is critical to the state's integrated water management activities because of the essential flood control and ecosystem functions of the Yolo Bypass, the property overlap with the Sacramento-San Joaquin Delta, and the number and diversity of threatened and endangered wildlife and plant species found within the region.

In 2011, the Westside Group received an IRWM grant from DWR to complete its plan. Their planning process facilitated an opportunity for water supply, land use management, flood management and environmental organizations to develop a holistic, multi-faceted plan that accomplished far more collectively than would have been produced individually. The challenges and opportunities identified in their IRWMP focus on improving education and awareness; providing safe and reliable water supplies; sustaining and modernizing infrastructure; fostering reasonable use; addressing water quality; and much more.

The Westside Group inventoried 141 projects ranging from large-scale drink-

ing water supply projects to habitat restoration programs, flood management projects and invasive species management initiatives. One of these projects is the Woodland-Davis Water Supply Project, which is a large-scale regional surface water supply project that will replace deteriorating groundwater supplies with safe, more reliable surface water supplies from the Sacramento River. This will offset the increasing costs of water supply for the cities of Woodland and Davis by diversifying their water portfolio and providing long-term water resource sustainability for existing and future water supply needs as well as improve drinking water quality and treated wastewater quality.

Kristin Honeycutt of the North Central Region Office (NCRO) is the Project Manager for the Westside IRWMP managing the day-to-day grant activity. Serving as Regional Services Representative (RSR) for the Westside Group, Kristin works with NCRO's Regional Coordinator Hong Lin to provide DWR's integrated water management perspectives. As the RSR, Kristin coordinates with other DWR programs and participates in Westside Group meetings to keep them informed on all-things-DWR. Kristin identified a need for mediation support within Lake County

*The Monticello Dam and Lake Berryessa substantially increased conjunctive use of surface water and groundwater throughout Yolo and Solano Counties. (Photo courtesy of Chris Lee of the Solano County Water Agency)*



## The Westside IRWM region is critical to the state's integrated water management activities because of the essential flood control and ecosystem functions of the Yolo Bypass.


**Kristin Honeycutt ,**  
DWR's Division of  
*Integrated Regional Water Management*

and assisted the county in receiving facilitation support services through DWR. The professional facilitation services will help encourage public participation and improve relationships within Lake County and, in turn, strengthen the ties of the entire Westside Group.

Since the final Westside IRWMP was released on June 25, 2013, the five member agencies have received board approval on the Plan and are in the process of shifting from the collaborative planning process to implementing projects recommended in their IRWMP. To measure progress toward the goals, objectives, Resource Management Strategies, and projects, the Westside Group will follow the IRWMP's Performance Monitoring Strategy.

One of the Westside Group's main challenges in practicing integrated water management is incorporating flood planning with water supply and resources management efforts, such as incorporating the Central Valley Flood Protection Plan's regional flood planning efforts into their IRWMP. The Westside Group recognizes the potential for inter-regional coordination and collaboration with neighboring IRWM regions, particularly in floodplain management issues, and is looking for state and regional leadership on how to integrate these efforts and truly advance integrated water management in the region.

The Westside Group realizes the value of the partnerships formed and the management framework established by IRWM for building capacity, leveraging resources, and maintaining and preserving water resources within its region. High-level state leadership aligned across multiple state agencies will be essential to the Westside Group in moving forward with IRWM implementation and supporting statewide initiatives. The IRWMP will serve as a critical planning document to help obtain State, federal, and other funding sources.

For more information on upcoming meetings, visit [westsideirwm.com](http://westsideirwm.com). 



# Making It Easier

## An Innovative Weir is Enhancing Fish Passage

By Doug Carlson

DWR's construction of a new Weir No. 2 on the Sutter Bypass north of Sacramento had two goals. One is the replacement of an outdated and potentially unsafe weir that was built in 1946 on the footprint of the original 1925 timber structure.

But some goals are more co-equal than others. "The objective of this project," said a 2003 Preliminary Engineering Technical Report, "is to enhance Butte Creek's anadromous fish populations by improving fish passage past Weir No. 2 over a greater range of flows."

Put simply, the project replaces the weir's outmoded fish ladder, which has been a problem for salmon migrating up the Sutter Bypass as they head to the Lower Butte Creek system and spawning beds in Butte and Plumas counties.

Chinook salmon runs occur throughout the year along this path, and the Spring Run species has been designated for protection by State and federal agencies. The introduction of barriers and water diversions over the past half-century has reduced the annual run from several thousand salmon to only

several hundred, according to the Butte Creek Watershed Conservancy.

DWR Senior Environmental Scientist Harry Spanglet says the new fish ladder at the rebuilt weir replaces one that has been "a significant barrier to salmon as they try to go upstream to spawn."

"Salmon typically shouldn't have to jump up a ladder more than one foot at a time," said Spanglet, but the old weir's 10-foot height forced the salmon to make four leaps of at least two feet each up a steep and narrow path.

The new structure has elevation differences of only one foot between 10 pools of water that are set into a gently sloping ladder. Salmon now have a choice between leaping up the ladder or swimming up to the next pool through holes built into the structure.

The new weir is noteworthy for another reason, too.

DWR traditionally has used radial gates that pivot down from the open position to block the flow of water on demand. Examples can be seen at the Bureau of

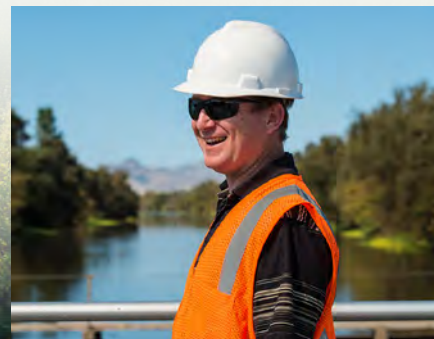
Reclamation's Delta Cross Channel near Walnut Grove and at Clifton Court Forebay.

Weir No. 2's new gates lie horizontal and flat below the water's surface in the open position. To raise the gates and dam the water behind the weir, compressed air is forced into large air bladders under the gates, which are pushed upward to form an inverted V.

The new weir is technologically advanced in other ways. The Obermeyer Hydro gates are operated remotely and automatically. Sensors monitor the water level above the weir and send the data electronically to the Flood Maintenance Office in the Division of Flood Management, which has overseen planning, permitting and construction of the project since its start a decade ago.

Engineer Brian Murphy says that's a huge improvement over the manual operation of the weir's wooden panels, which on occasion had to be maintained several times a day, a practice that was routine for decades. 💧

Brian Murphy, DWR Engineer and project manager, inspects closing of gates for the new Weir No. 2 in October for first time. Located approximately 27 miles upstream of the confluence of the Sacramento and Feather rivers, Weir No. 2 includes an improved fish ladder (right).





(Left to Right) At the Chowchilla Bifurcation Structure, South Central Region Office staff Josh Bannister and Alexis Phillips-Dowell assess the potential effects of subsidence on the San Joaquin River.

# A Closer Look at California's Second Longest River

By Jennifer Iida

## San Joaquin River Restoration Program's Channel Capacity Report

The San Joaquin River Restoration Program (SJRRP) is taking a closer look at potential flood impacts from implementation of the SJRRP along portions of the San Joaquin River for the newly created SJRRP's Channel Capacity Report.

"One of the potential flood impacts from the actions by the SJRRP is increasing the risk of levee failure within the restoration area," said Paul Romero, DWR Supervising Engineer in the River Investigations Branch of the Division of Integrated Regional Water Management's South Central Region Office. "Until adequate data and evaluation is available to better understand the flood risk, the Program Environmental Impact Statement and Environmental Impact Report states that the SJRRP will keep flows in the channel below the base of the levees."

DWR is evaluating potential flood impacts that could result from releasing specific flows from Friant Dam during different water year types and

has initiated the San Joaquin Levee Evaluations (SJLE) project to identify potential flood impacts to levee seepage and stability due to restoration flows along the San Joaquin River and flood bypasses.

"Currently, DWR is also working to understand and advise the program on sediment transport effects on channel capacity and the impacts of recently identified subsidence within the restoration area," said Romero. "Analysis includes hydraulic and sediment transport modeling and topographic surveys. It is significant because sediment deposition and subsidence can reduce the ability of channels to convey flows."

The Channel Capacity Report, which will be updated annually, summarizes these evaluations and recommends channel capacities that will limit restoration flows. Reclamation is also looking at impacts due to seepage on adjacent land uses.

DWR is also part of the five-member team of the Channel Capacity Advisory

Group that includes the U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, Central Valley Flood Protection Board and the Lower San Joaquin Levee District, which is the local maintaining agency for many of the channels and levees in the area, that will review the recommendations in the report.

The SJRRP, a partnership by the Bureau of Reclamation, DWR, U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the California Department of Fish and Wildlife, was established in 2006 to help restore flows and salmon populations in the 153-mile segment of the San Joaquin River below Friant Dam to the confluence of the Merced River, while reducing or avoiding adverse water supply impacts.

The Channel Capacity Report is available at [http://restoresjr.net/program\\_library/02-Program\\_Docs/20130927\\_ChannelCapacityReportPublicDraft.pdf](http://restoresjr.net/program_library/02-Program_Docs/20130927_ChannelCapacityReportPublicDraft.pdf)



# People

## Meet DWR's New Tribal Policy Advisor: Anecita Agustinez



Manager of the Office of Legislative and External Affairs and the Office of Health Access at the Department of Health Care Services. She previously was the Assistant Director of the Office of Native American Affairs at the Department of Justice in the Office of the California Attorney General.

Anecita likes what she's learned about DWR since her August appointment.

"The most encouraging thing I've experienced is the willingness of our engineers and scientists to provide the resources and information I need to develop the consultation policy mandated by the Governor's Executive Order B-10-11," she says. "What's unique to DWR is the strong support and willingness here to work with

the tribes in a government-to-government relationship."

Anecita is building her efforts on the foundation created by her predecessors Barbara Cross and Kimberly Johnston-Dodds.

California has more than 200 Native American tribes, each with different needs in their water management awareness and capabilities. Anecita says the tribal community appreciates DWR's commitment to working with them, and she adds there's really no alternative.

"All land here is sacred. All land here is Indian country," she says. "You can't turn around and not be on tribal land or on traditional ancestral homeland. Even though districts and boundaries are being redefined, the tribes have always been here. They know what their traditional homeland is, and that will never change. That's why there's such

a strong tie to the land and ancestry among Indian people."

What has changed is government. Anecita says the tribes' past engagement with government has taught them to never accept anything at face value. "They're going to test me and support me at the same time," she says. "And I can tell you, they are watching me."

DWR employees will be watching, too, as they work with Anecita to integrate California's Native American tribes in the management of a resource that's sacred to all people. ♦

## Jeff Said Takes the Helm at Delta Field Division

When the call came last year, San Joaquin Field Division Chief Jeff Said didn't hesitate. DWR O&M Chief Dave Duval needed him to fill the same role at Delta Field Division—like, now.

"My family was living in Tehachapi," said Jeff. "And once we decided on it, we got everything out of the house, sold it, found a rental in Manteca and put the kids into new schools, all in 20 days."

A hectic move with a family of five might qualify for hardship pay in the military, but Jeff says everyone took it in stride. "My family was all for it and loved the adventure."

It's an adventure with a familiar feel to it for Jeff. He worked in the Delta Field Division years earlier. After 11 years as Chief in the San Joaquin Field Division, he's now with some of the same people he knew in the 1990s.

Jeff has spent time in every field division, except Southern. His DWR career began in 1982 when he ap-

Anecita Agustinez describes her job as DWR's new Tribal Policy Advisor with a passion imbued with more than 30 years of advocacy on behalf of California's Native American Tribes.

Her primary responsibilities are to provide policy support and recommendations regarding tribal issues to Director Mark Cowin and Chief Deputy Director Laura King Moon. She attended Stanford University to study Political Science and is a tribal citizen of the Dine (Navajo) Nation.

As a Bay Area resident, Anecita was active with the Bay Area Native American community as Director of the American Indian Center in San Jose and founding member of the American Indian Alliance of Santa Clara Valley.

Before joining DWR, she served as the Native American Liaison and



prenticed at the Edmonston Pumping Plant, but the DWR seed was planted much earlier.

Harry C. Said, Jeff's father, worked at DWR for more than 20 years and retired as a Senior Water and Power Dispatcher in the mid-1990s. Harry made a lasting impression on Jeff when he took his son to the Dos Amigos Pumping Plant to watch water flow into the State Water Project's aqueduct there for the first time.

"I really don't remember how old I was—maybe around 10," he says. "I do remember I was cold and wondered what the big deal was, but it was cool to stay up late and see all the excited adults," said Jeff.

Jeff's new post as Delta chief became official on August 1, but he says boxes still needed unpacking months later. When the pace eventually settles down, he may introduce his wife Kelly to the region as they ride their bikes.

Jeff and about 2,000 other bicyclists inaugurated the TransAmerica Trail in 1976 during America's bicentennial summer—some traveling east, others west. The trip took 82 days along 4,250 miles of trail through 10 states.

"We started at Reedsport, Oregon and ended in Williamsburg, Virginia," said Jeff. "We crossed the Continental Divide 11 times while heading into Wyoming and passing through Yellowstone Park and into Colorado. The highest point on the trail was outside of Breckenridge, Colorado at Hoosier Pass—11,542 feet. Let me tell you, it was one helluva downhill after that!"

His DWR career has been anything but downhill. 💧

## Tony Meyers Becomes Chief of San Joaquin Field Division

Tony Meyers worked as an engineer in the private sector for 26 years before a long-time interest in the State Water Project (SWP) brought him to DWR in 2009.

Tony became Chief of the San Joaquin Field Division on November 1 after serving as Engineering Branch Chief for the Division of Operations and Maintenance in Southern Field Division and earlier as Chief of the Lancaster Project Headquarters for the Division of Engineering's Construction Branch.

Back when Tony was studying engineering at Sacramento State in the early 1980s, one of his professors, Dr. Kenneth Kerri, made a big impression on him about the SWP. "That's when I first appreciated the State Water Project's importance in moving water around California to where it's needed," said Tony.

He assisted Dr. Kerri in promoting the proposed Peripheral Canal, but voters rejected it in 1982. After graduating from Sacramento State a year later, Tony began working on land development projects near and far from Galt, California near the Sacramento-San Joaquin Delta, to the Southwest U.S.A., to the King Abdullah Economic City megaproject in Saudi Arabia, on schools in Abu Dhabi and at a converted Army base in China.

The world-wide economic downturn several years ago helped Tony decide to come home. "DWR was a natural fit for me to fulfill my enthusiasm for the State Water Project by working with it on a daily basis."



As Chief of the San Joaquin Field Division, Tony says his job comes down to ensuring the SWP operates smoothly. "It's like maintaining a car," he says. "Constantly 'checking the dipstick' to make sure everything's in working order, ensuring we don't have excessive wear, preventing failures."

Tony and his wife Janice are still living in their Palmdale home within Southern Field Division's territory until they can make the move north. Until then, he'll be commuting to his office at the San Joaquin Field Division headquarters adjacent to the Chrisman Pumping Plant.

Tony has two daughters living in Phoenix, Arizona and a son in Houston, Texas. Andrea has an interior design business; Michelle is a college recruiter for the online review site Yelp and Matt is an auditor for Waste Connections. Tony and Janice collectively have seven children and eight grandchildren.

Tony is quick to add that both daughters once cheered for the Arizona Cardinals NFL team. In light of his promotion, it's easy to imagine the whole family cheering for dear Dad. 💧



# DWR Leaders Graduate

By Sean Walsh

As part of DWR's Management Development Program, 56 DWR managers graduated from the year-long training program in 2013.

Participants nominated by their direct supervisors learn more about DWR and the tools to becoming more effective leaders. The program, created in 1995, has graduated more than 550 DWR managers.

While in the program, participants team together to develop and complete a project that could be implemented

by the Department. The final session of the program begins with each team giving a 15-minute presentation on its project to the Governance Board. After the presentations, the Governance Board members share their thoughts and support of the participants, their projects and the program. Kim Oliphint served as the Program Mentor. There were two waves of graduates in 2013.

*\* (Not in Italics are graduates. Italics names are from presentation audience.)*

## Wave 1: (Left to Right)

**Front:** Gail Newton, Matt Reeve, Samson Haile-Selassie, Susan Sims, Kim Oliphint, Kathy Kelly, Molly White, Elaine Hall, Jessica Roles, Kathie Kishaba, Nancy Vogel, Buffy Alvarez, Ted Craddock. **Middle:** Deane Burk, Gary Bardini, John Berringer, Morrie Orang, Ali Porbaha, Holly Nichols, Sukhbir Sing, Mark List, Natasha Nelson, Dave Encinas, John Pacheco, Charles Tyson. **Back:** Tom Lutterman, Jason Kindopp, Joe Yun, Bob Scarborough, Scott Hunt, Tracy Ching, Brian Moniz, Jim Gleim, Steven San Julian, Geoff Shaw.



## Wave 2: (Left to Right)

**Front:** Jeanne Lee, Kenny Karcher, S. Praba Pirabarooban, Tasmin Eusuff, Kim Oliphint, Kathy Kelly, Gail Newton, Laura Peters, Nicole Darby, Jeanne Kuttel, Tony Perez, David Martasian. **Middle:** Bill Ehorn, Marcus Yee, Darren Choyce, Leslie Pierce, Dean Crippen, Al Vargas, Dion Abellon, Teresa Connor, Kathie Kishaba, Jim Eto, Anthony Chu. **Back:** Wilbur Huang, Sal Batmanghlich, Jesse Cason, Jr., Steven Tolle, Ari Balakrishnan, Shawn Pike, David Wright, Mike Hernandez, John Paasch, Tom Ciszewski (Not in photo: Hamid Bonakdar.) 💧





# A Doorway

## to a New Career

### Success showing in DWR's Apprentice Graduate Program

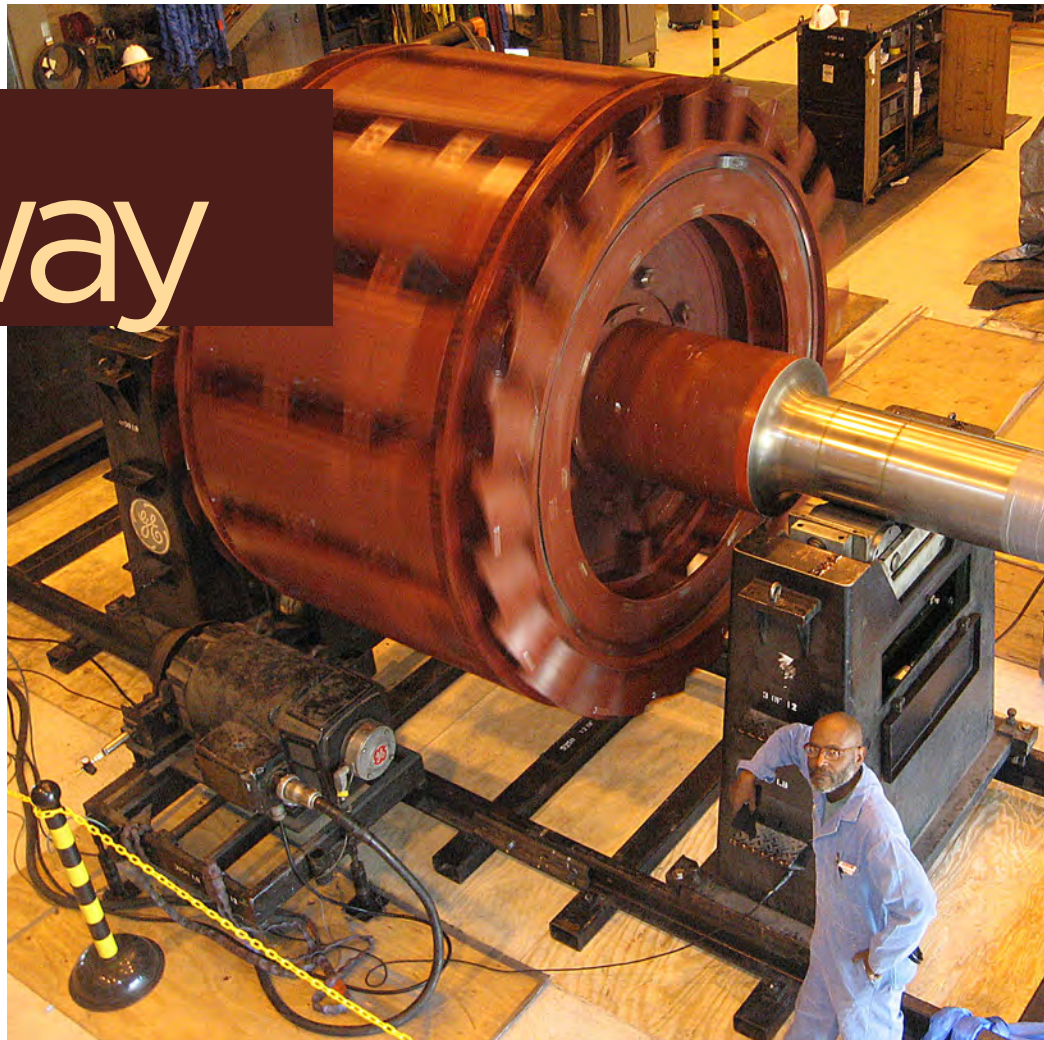
With many paths to a successful career, what does it take to do well in DWR's hands-on learning program? DWR Hydroelectric Plant Mechanic Kenneth Webbs, who began DWR's Apprentice Program after being a construction manager in Iraq and recently a DWR engineering student assistant, knows what it takes to achieve a career of a lifetime.

"The Apprentice program presented to me a chance for a permanent position with a good salary, a defined career path and a chance to learn additional job skills in a technical environment," said Ken, who graduated in 2013.

Apprentice Graduate Ken shares a few tips about his success in DWR's Apprentice Program.

#### **What helped you to succeed in the program?**

"What helped me to succeed more than anything was the ability to pick the brains of the journeymen and leads that worked throughout the Southern Field Division. I knew that if I needed assistance or advice my crew members were there to help me."



#### **What were the biggest challenges?**

"Home studies were the most challenging part of the apprentice program. It takes a lot of self-control and discipline to complete them on time, all the while trying to maintain a good grade point average. Allocating enough time in between the numerous home studies, classroom, finals and hands-on exams requires an apprentice to be constantly monitoring the schedule, because it's really easy to get behind and extremely difficult to get caught up."

#### **What did you gain from the program?**

"Working with the different crews at different locations and learning different techniques was invaluable to my training. Working within the different plants gave me a greater understanding of the

State Water Project and how Southern Field Division contributes to the State's efforts.

"I had an opportunity to expand my skill set. I was given ample time to practice skills that I already had basic knowledge of, like welding and soldering. I was also given training in new skill sets, such as milling, operating a lathe and radial arm drills and using an index head.

"The best part of the program is the satisfaction you get when you look back at what you managed to accomplish with all the sacrifices, hard work, and late nights studying and after four years, you can look back and say it's finally finished!"



## Congratulations TO DWR'S

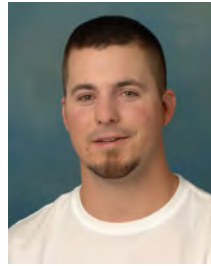
# 14 Apprentice Graduates!

DWR's Operations and Maintenance Apprentice Program has graduated more than 500 apprentices since 1971. The program provides training for utility craftworkers, Hydroelectric Plant (HEP) operators, HEP mechanics and HEP electricians during the three to four years of on-the-job training at DWR's five field divisions and two flood yards.

To learn more about DWR's Apprentice Program, visit the website at [www.water.ca.gov/apprenticetraining](http://www.water.ca.gov/apprenticetraining) 💧



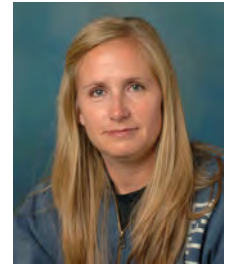
**Albert Kopp**  
Hydroelectric Plant  
Mechanic  
San Joaquin Field Division  
June 2013



**Lincoln Carey**  
Utility Craftworker  
Sutter Maintenance Yard  
August 2013



**Gregory Dudley**  
Utility Craftworker  
Sutter Maintenance Yard  
August 2013



**Tami Clark**  
Utility Craftworker  
Sutter Maintenance Yard  
September 2013



**Jacob Guillory**  
Hydroelectric Plant  
Electrician  
Oroville Field Division  
December 2013



**Michael Rouch**  
Hydroelectric Plant  
Mechanic  
Delta Field Division  
December 2013



**Don Manglona**  
Hydroelectric Plant  
Electrician  
Southern Field Division  
December 2013



**Kenneth Webbs**  
Hydroelectric Plant  
Mechanic  
Southern Field Division  
December 2013



**Martin Summers**  
Hydroelectric Plant Operator  
Oroville Field Division  
January 2014



**Raymond D'Ascenzo**  
Hydroelectric Plant Operator  
Southern Field Division  
January 2014



**Tyrel Voss**  
Hydroelectric Plant Operator  
Delta Field Division  
January 2014



**Rebecca Devoto**  
Hydroelectric Plant Operator  
Southern Field Division  
February 2014



**Jeffrey Mickey**  
Hydroelectric Plant Operator  
San Joaquin Field Division  
February 2014



**Stephanie Ruane**  
Hydroelectric Plant Electrician  
Delta Field Division  
February 2014



# Unit

## Jones Tract Defense Team

As part of the State's defense team for Jones Tract, the team was awarded for analyzing the complex legal and technical problems and presenting information to the court in ways that were understood by the court while being truthful to the facts.

Left to Right: **(Back)** Tracy Pettit (O&M), Rebekah Gibson (Office of the Chief Counsel), Francis Chung (BDO), Andy Chu (O&M), Tara Smith (BDO), Scott Olling (PAO). **(Front)** Kathy Kelly (BDO), Dave Mraz (FESSRO), Bob Nozuka (IRWM), Jamie Anderson (BDO), Subir Saha (BDO), Kathie Kishaba, Deputy Director. **(Not in photo)** Nicky Sandhu, Rueen-Fang Wang of BDO; Sterling Sorenson of CVFPB; Dave Lawson, Tony Mejia of FESSRO; Scott Morgan of the Office of the Chief Counsel; John Leahigh, Dave Rennie of O&M; Jim Phillips of State Attorney General's Office; Curt Schmutte of Metropolitan Water District; Brad Hall of Northwest Hydraulic Consultants; Les Harder of URS Corporation.



## Georgiana Slough Non-Physical Barrier Team

The Georgiana Slough Non-Physical Barrier Team was awarded for its extraordinary efforts in conducting a major DWR field study to show the effectiveness of the Bio-Acoustic Fish Fence (BAFF) as a tool to protect salmon migrating through the Delta. The Non-Physical barrier using BAFF technology was installed in 2011 and 2012. The study contributed to helping DWR meet its goal of protecting and enhancing the Bay Delta Estuary.

Left to Right: **(Back)** Matt Mulligan (IRWM), Dave Schaap (IRWM), Jacob McQuirk (BDO), Jeff Tkach (DES), Ben Geske (BDO). **(Middle)** Ryan Reeves (BDO), Dave Huston (IRWM), Hoang Le (DOE), Mike Cane (BDO), Don Santos (BDO), Bill McLaughlin (BDO), S. Praba Pirarooban (DOE). **(Front)** Kathy Kelly (BDO), Genny Schrader (BDO), Rachel August (DES), Analisa Martinez (DES), April McEwen (FESSRO), Khalid Ameri (BDO). **(Not in photo)** Gina Beer, Bryce Kozak of BDO; Mike Bradbury, Cynthia LeDoux-Bloom of DES; Kari Bianchini, Chris Erickson, John Personeni, Brian Whitaker, Chris Wu of DOE; Colin Hanley (FESSRO).





## Fish Science Building and Warehouse Project Team

The Fish Science Building and Warehouse Project Team was honored for its dedicated efforts in designing and awarding the contract for the construction of the Fish Science Building and Warehouse near the John E. Skinner Fish Facility in Byron.

Left to Right: **(Back)** Javier Miranda (BDO), Benjamin Scheeline (DOE), Bob Yeadon (BDO), Roger Padilla (BDO), Dave Otto (DOE). **(Middle)** Elena Cowan (BDO), Rhett Cotter (O&M), Rajendra Dave (DOE), Tru Nguyen (DOE), Rebecca Gilbert (DES), Katherine Marquez (DES). **(Front)** Kathy Kelly (BDO), Teresa Geimer (BDO), Daniel Chin (DOE), Elena Hartsough (DOE), Lesley Hamamoto (DES), Kathie Kishaba, Deputy Director. **(Not in photo)** Shah Adil of BDO; Cindy Beach, Danielle Bohlen, Mike Chen, Hilario DeGuzman, Yen-Hsi Deng, Christine Erickson, Teresa Figueroa, John Hooper, Yaling Liu, Alfred Macias, David Sarkisian of DOE; Rey Chavez, Daniel Lamb, Sheryl Moore, Wilma Ordiz of O&M)



## 2012 Stipulation Study Team

The team of the 2012 Stipulation Study for Settlement Operations of the State Water Project was honored for overcoming the extremely difficult technical and coordination challenges during the the acoustic tagging, transport and release components of the study. The team's efforts enabled DWR to collect information about steelhead entrainment into the South Delta under different State Water Project and Central Valley Project operations.

Left to Right: **(Back)** Matt Reeve (BDO), Joshua Martinez (DES), Kevin Reece (DES), Randy Mager (FESSRO), Bryant Giorgi (O&M). **(Middle)** Tracy Pettit (O&M), Kijin Nam (BDO), Javier Miranda (BDO), Michele Johnson (BDO), Shahid Anwar (BDO), Roger Padilla (BDO), Andy Chu (O&M). **(Front)** Kate Le (BDO), Alicia Seesholtz (DES), Jane Shafer-Kramer (BDO), Mike Ford (O&M), James Edwards (O&M), Dan Yamanaka (O&M). **(Not in photo)** Virginia Afentoulis, Clay Booher, Kathi Bristow, Kevin Clark, Anna Doty, Veronica Wunderlich of BDO; Laura Bermudez, Angela Llaban, Lacey Wall, Edmund Yu of DES; Tracy Hinojosa, Loi Tran, Wenli Yin, Aaron Miller of O&M)



IRWM—Integrated Regional Water Management; BDO—Bay Delta Office; DES—Division of Environmental Services; FESSRO—FloodSafe Environmental Stewardship and Statewide Resources Office; O&M—Operations and Maintenance; DOE—Division of Engineering; PAO—Public Affairs Office



## New Hires

**Anecita Agustinez**  
Executive  
C.E.A.

**Adeel Ahmad**  
Flood Management  
Electrical Engineer

**Richard Austrum**  
Southern Field Division  
HEP\* Operator

**Karen Baker**  
Technology Services  
Systems Software Specialist II

**Jeremy Bandy**  
Delta Field Division  
HEP\* Operator

**Keenan Booker**  
Engineering  
Engineer

**Mark Bradley**  
FESSRO\*\*\*  
Senior Engineer

**Diana Brooks**  
Statewide Integrated Water Mgmt.  
Program Manager III

**Peter Buchman**  
Environmental Services  
Environmental Scientist

**Bradley Cacciabarne**  
San Joaquin Field Division  
HEP\* Operator Apprentice

**Casey Canal**  
San Luis Field Division  
HEP\* Electrician Apprentice

**Lloyd Carter**  
San Luis Field Division  
HEP\* Electrician I

**Timothy Case**  
Engineering  
Transportation Surveyor Party Chief

**Cheuk Chan**  
Fiscal Services  
Accountant Trainee

**Julie Chan**  
Flood Management  
Management Services Technician

**Armando Chavez**  
San Joaquin Field Division  
HEP\* Mechanic Apprentice

**Dennis Clinkenbeard**  
Southern Field Division  
HEP\* Mechanical Supervisor

**Jeffrey Cooper**  
Oroville Field Division  
HEP\* Electrician Apprentice

\*Hydroelectric Plant

\*\*\* FloodSAFE Environmental Stewardship  
and Statewide Resources Office



(Left to Right) Floodplain Management Association's Award recipients included Jason Sidley, Terri Wegener, Scott Shapiro and Michael Sabbaghian. (Not in photo: Rodney Mayer)

## Outstanding in Floodplain Management

DWR's Flood Management staff captures the spotlight during the 2013 Floodplain Management Association's Awards event, winning three of seven awards.

### Communications and Outreach Award

#### National Coalition of Flood Project Partners

As the founders of the National Coalition of Flood Project Partners, Scott Shapiro (Downey-Brand) and Michael Sabbaghian ignited a movement to exemplify how outreach and collaboration can equate to compelling outcomes.

The National Coalition of Flood Project Partners, an informal nationwide organization working to advance common understanding of issues, has been advocating the crediting of local projects to count toward future federal work.

"By developing this coalition, we have been successful in advancing issues in Washington D.C.," said Sabbaghian. "It is our greatest hope that this can be a model for the other common issues."

### Excellence in Floodplain Management Award

#### California's Flood Future Report

The "California's Flood Future" Report created by DWR and the U.S. Army Corps of Engineers to assess flood risk and address California's flood management needs broke new ground for both agencies and garnered statewide attention. It became the first-ever comprehensive analysis of California's flood risk.

"California's Flood Future is a result of a multi-year effort that brought to light extremely critical information," said Terri Wegener, DWR's project lead for the report. "We're very proud of the report. It's an important step toward a California that's better prepared for floods."

The report is available at <http://www.water.ca.gov/sfmp/flood-future-report.cfm>

### Andy Lee Award for Extraordinary Service

#### Rodney Mayer, FloodSAFE Executive

With 15 years in the Division of Flood Management, Rod Mayer's outstanding achievements illustrate his outstanding technical abilities in understanding flood risk in the Central Valley, to effectively communicate that risk and to engage others. He helped author the initial draft of the Disaster Preparedness and Flood Protection Bond of 2006 (Proposition 1E), establish the FloodSAFE California Initiative and develop the Urban Levee Design Criteria and Urban Level of Flood Protection Criteria.

"I was surprised and delighted to receive the Andy Lee Award for Extraordinary Public Service from the Floodplain Management Association," said Mayer. "I knew Andy for many years and was pleased when FMA named this award after him, never thinking someday I would be a recipient. I am glad to have been one cog in a large wheel that has been rolling out a lot of good work over the years, improving public safety and the environment in our floodplains." 💧



## DWR Alumni Corner

# Oral Video History Program

By George Qualley, *DWR Alumni Club Member*

**DWR Retirees** are providing a great source of first-hand knowledge about DWR's history and the State Water Project (SWP) through the Department's Oral Video History Program.

Retired Annuitants Ernie James and Art Winslow helped the Public Affairs Office create the Oral History Program in 2000 after they realized DWR's history was disappearing with the passing of its retired employees.

Technical information on the SWP and other DWR programs was available in bulletins and reports, but the personal experience of DWR employees wasn't available. The DWR Oral History Program gives DWR employees access to videos of DWR retirees who have shared their knowledge and history along with their personal memories.

Of the 189 retiree interviews, Ernie and Art recorded 150 of them from 2000 to 2004. A biographical synopsis of each person interviewed was then compiled into a 2005 report. Since 2005, Stephen Kashiwada has taken Ernie's spot alongside Art Winslow to conduct an additional 39 interviews.

The treasure trove of interviews includes DWR Directors Harvey Banks, William Warne and John Teerink (all audio taped many years earlier), as well as later videotaped interviews with Bill

Gianelli, Ron Robie and Dave Kennedy.

Robin Reynolds' (Chief of Planning in the late 1950s) video mentions going with Harvey Banks to Governor Pat Brown's backyard at the Old Governor's Mansion to ask for his support for a \$2.25 billion State Water Project bond. Governor Brown, who had a reputation for accurately sensing voters inclinations, reportedly told them, "That big of a bond would not pass; downsize the project to \$1.75 billion and I will support it."

Email [DWRNews@DWR](mailto:DWRNews@DWR) for information on how to view DWR's video archive.

While the DWR Oral Video History Program is an outstanding resource to both current and past DWR employees, retiring employees are urged to join the DWR Alumni Club and rekindle relationships with former colleagues. We produce a quarterly Alumni Newsletter and sponsor three "big events" each year—the March Annual Luncheon, the June River Cats Game outing and the September Picnic.

These are great venues for reflecting on shared experiences from your working years at DWR. In future issues of DWR News, we will highlight Club activities and our members' experiences in a "DWR Alumni Corner." 💧

### Attention DWR Retirees:

If you are interested in joining DWR's Alumni Club, contact:

**Richard Jones**, DWR Alumni Club

**(916) 212-3515** or email [rdcjones@earthlink.net](mailto:rdcjones@earthlink.net)

## New Hires

**Steven Currie**  
Southern Field Division  
HEP\* Operator Apprentice

**April Duenas**  
Human Resources Office  
Associate Personnel Analyst

**Rodney Edwards**  
Southern Field Division  
HEP\* Electrician Apprentice

**Joseph Fairbanks**  
Oroville Field Division  
HEP\* Mechanic Apprentice

**Ambrose Flores**  
Delta Field Division  
HEP\* Mechanic Apprentice

**Emilio Flores**  
San Luis Field Division  
HEP\* Mechanic Apprentice

**Leslie Gallagher**  
CVEPB\*\*\*\*  
Attorney III

**Salvador Garcia**  
Operations and Maintenance  
Heavy Equipment Mechanic

**Jason Gasser**  
Engineering  
Transportation Surveyor

**Meredith Harvan**  
Flood Management  
Engineer

**Daniel Huitt**  
Operations and Maintenance  
Mechanical Engineer

**Ramzi Ibrahim**  
Operations and Maintenance  
Environmental Scientist

**Nimal Jayasundara**  
Bay-Delta Office  
Engineer

**Rochelle Johnson**  
Human Resources Office  
Associate Personnel Analyst

**Jeremy Johnson**  
San Joaquin Field Division  
HEP\* Electrician Apprentice

**Elliott Johnson**  
San Luis Field Division  
HEP\* Mechanic Apprentice

**Babak Kaviani Joupari**  
Engineering  
Electrical Engineer

**Jeffrey Kellogg**  
San Joaquin Field Division  
HEP\* Electrician I

**Sultan Khan**  
Technology Services  
Systems Software Specialist II

**Jongyoun Kim**  
Statewide Integrated Water Mgmt.  
Environmental Scientist

**Reggie Knott**  
San Joaquin Field Division  
HEP\* Operator

**Kelly Kolding**  
San Luis Field Division  
HEP\* Operator Apprentice

**Kathrine Konstantinidis**  
Southern Region Office  
Environmental Scientist

**James Kortuem**  
Flood Management  
Utility Craftworker Apprentice

**Corey Lasso**  
Flood Management  
Engineer

**Sarah Lesmeister**  
Environmental Services  
Environmental Scientist

**Carole Ludlum**  
Technology Services  
Systems Software Specialist II

**Israel Luna**  
Southern Field Division  
HEP\* Mechanic Apprentice

**Lisa Ma**  
Human Resources Office  
Personnel Specialist

**Dina Marquez**  
Southern Field Division  
Office Technician (Typing)

**Jacob Martinez**  
Delta Field Division  
HEP\* Mechanic Apprentice

**James Massey**  
San Luis Field Division  
HEP\* Operator Apprentice

**David Mathews**  
Oroville Field Division  
HEP\* Mechanic I

**Corey McCaslin**  
Oroville Field Division  
HEP\* Electrician I

**Lawrence Molina**  
Business Services Office  
Warehouse Worker

**Richard Montecino**  
Southern Field Division  
Materials and Stores Specialist

**Lynn Moquette**  
Flood Management  
Engineer

\*Hydroelectric Plant  
\*\*\*\* Central Valley Flood  
Protection Board



# Retirements

## Noel Lerner

Noel Lerner, DWR's just-retired Chief of the Flood Maintenance Office, might want to rethink his relationship with water, especially the frozen kind.

Noel's DWR work had him fighting to keep water where it belongs—between levees and in designated flood channels and out of farmland and neighborhoods.

His off-duty hobbies put him in a struggle with water, too. Noel's canoed frothy stretches of rivers in California, Oregon, Arizona, Utah and Idaho, and during the cool months his skates carve the ice three days a week at

Roseville's Skatetown.

Noel's mastery of water at work and play may have been too much for water, though, because water has pushed back, breaking Noel's left ankle ("I fell backwards doing a Mohawk") and three years later doing the same to his right wrist after a tumble.

But water didn't stop there. Noel's wife and son both suffered fractures while on the ice. Enough already, Noel. What's with you and water?

"I have absolutely nothing against water," said Noel. "Although I hated skating as a kid, my dad didn't skate,

so I had to go with my mom. As soon as I could, I broke away and didn't skate again for 40 years."

As a Sacramento resident, Noel saw how unruly water could be in the floods of 1986 and 1997, so after working as a consulting engineer on sewer systems and water transmission lines in private industry, he decided to give DWR a shot.

As Flood Maintenance Branch Chief, Noel knows floods. "I've spent a lot of time working with DWR's crews and local agencies and residents on the Sutter Bypass," he said. "I've really enjoyed working with the maintaining agencies and resolving our shared problems."

Another highlight was planning and permitting the Tisdale Bypass Sediment Removal Project in Sutter County.

"From design to permitting and construction, we did it all in nine months," said Noel. "We removed about 1.8 million cubic yards of material from the bypass to restore its hydraulic capacity." The project also created a 132-acre habitat restoration site near Colusa.

Managing vegetation on levees and in channels has been a constant challenge, and so have changing environmental regulations and meeting work demands with a finite labor supply.

"The biggest challenge recently has been filling rodent holes in levees near giant garter snake habitat," he said.

Noel left those concerns behind upon retirement and now expects to put his woodworking skills to the test turning out hollow vessels, bowls, pens and salt and pepper mills. Through his former company, he is still a minority owner of a firm that manufactures wastewater treatment equipment, so he'll do part-time work there.

And then there's the skating. Noel said he'll continue going to the Roseville rink to skate and take lessons, because skating is one of those sports where you need instruction if you want to improve, he said.

"If you ever want to see me embarrass myself, come to Skatetown three mornings a week between 7:30 and 8:30," he laughed.

He'll be the one practicing the Mohawk. ♦

... [water.ca.gov](http://water.ca.gov)







## Khalil Jafarnejad

DWR folks who worked closely with Khalil Jafarnejad, Chief of the Electrical Engineering Branch in the Division of Operations and Maintenance, likely aren't surprised by the Arabic meaning of his first name—honorable companion.

That's what he was while working on pieces of the State Water Project until his December retirement. Going deeper, even his last name seems fitting for this 31-year DWR employee. Jafar means stream in Arabic.

So far, so good, but there's more. Jafarnejad was actually Khalil's middle name until he dropped his given last name—Ghanatsaz—and that begs the question, "What's in a name?"

In Khalil's case, quite a bit. Both his grandfather and father helped construct the Persian water conveyance system called Qanats in the Mashad area of Iran, he said. An alternate spelling of Qanat is Ghanat, so affixing 'saz' to Ghanat completes the meaning: builder of Ghanats.

"At one time, my father had 700 men working for him building Ghanats," Khalil said. "They spent their lifetimes working on this waterway of deep well shafts and tunnels. My career has been spent doing much the same, and my son, who is also a civil engineer with DWR, is on the same path. Working with water is in our blood."

Khalil dropped his last name after immigrating from Mashad, Iran in the late 1970s. He earned a Bachelor of Science degree in electrical and electronic engineering from Sacramento State in 1981.

Khalil's entire engineering career has been with DWR. He oversaw all phases of the electrical design, construction management and maintenance of hydroelectric power and pumping plants for State Water Project facilities. He worked on the Bottle Rock and South Geyser Powerplants, Pearblossom Pumping Plant Expansion, Coastal Branch Phase II, East Branch Extension Phase II, the Sutter Bypass Pumping Plant Control System Rehabilitation, South Bay Aqueduct Enlargement and various other hydroelectric projects.

"I feel very honored and privileged to have worked with some of the pioneer designers and planners of the State Water Project in the early stages of my career," Khalil said. "I've had many positive experiences at DWR, both professional and personal, that I will always remember fondly."

Khalil assisted during the flood of 1997.

Khalil's retirement plans include spending time with family and friends, jogging, gardening and catching up on his "honey-do" list. He also plans to visit his father in Mashad.

"I love being outdoors and tending to my garden, which usually produces something good to eat and allows me to be a home canner," he says. "I'm known for my pickled vegetables and jams."

After more than three decades of rigorous DWR work schedules, Khalil says he's looking forward to creating an environment that includes a lot of spontaneity.

"I plan to do and try new things and go with the flow," he says. With all those hidden meanings in his name, that flow is certain to be downstream. 💧

## New Hires

### Michael Morris

South Central Region Office  
Associate Information Systems Analyst

### Haya Moscoupos

Engineering  
Staff Services Analyst

### Eva Olin

Environmental Services  
Environmental Scientist

### Brittany Oliphint

Business Services Office  
Office Technician (Typing)

### Brendon Owens

Southern Field Division  
HEP\* Operator Apprentice

### Anthony Padilla

Fiscal Services  
Accountant Trainee

### Scott Parker

Southern Field Division  
HEP\* Mechanic Apprentice

### Benjamin Patten

San Joaquin Field Division  
HEP\* Electrician I

### Christie Perez-Peel

San Joaquin Field Division  
HEP\* Operator Apprentice

### Vladimir Pikalov

Operations and Maintenance  
Mechanical Engineer

### Gus Platis

Engineering  
Engineer

### Michael Roberts

FESSRO\*\*\*  
Senior Environmental Scientist

### Forrest Roberts

San Joaquin Field Division  
HEP\* Electrician Apprentice

### Matthew Samson

Operations and Maintenance  
Heavy Equipment Mechanic

### Jonathan Schmidt

Southern Field Division  
HEP\* Mechanic Apprentice

### Jacob Shamblin

Oroville Field Division  
HEP\* Operator

### Brianna Shoemaker

Executive  
Staff Services Analyst

### Preston Shopbell

Flood Management  
Engineer

### Laura Souza

Delta Field Division  
HEP\* Operator Apprentice

\*Hydroelectric Plant

\*\*\*FloodSAFE Environmental Stewardship  
and Statewide Resources Office



## New Hires

**Austin Stanhope**  
Oroville Field Division  
HEP\* Electrician Apprentice

**Ryan Stark**  
Operations and Maintenance  
Heavy Equipment Mechanic

**Mark Strahm**  
Engineering  
Engineer

**Richard Stuart**  
Southern Field Division  
HEP\* Electrician Apprentice

**Todd Thompson**  
Integrated Regional Water Mgmt.  
Senior Engineer

**Jose Torres**  
Flood Management  
Engineer

**Christopher Tovar**  
San Joaquin Field Division  
HEP\* Mechanic Apprentice

**Lee Tran**  
Delta Field Division  
HEP\* Electrician Apprentice

**Wesley Weddle**  
Flood Management  
Utility Craftworker Apprentice

**Paul Weeks**  
San Joaquin Field Division  
HEP\* Mechanic I

**Robert Whitlock**  
Human Resources Office  
Staff Services Analyst

**Rochelle Wicky Amrhein**  
Flood Management  
Environmental Scientist

**Roxanne Williams-Bush**  
Engineering  
Office Technician (Typing)

**William Winter**  
Oroville Field Division  
HEP\* Operator Apprentice

**Jasper Wong**  
Fiscal Services  
Accountant Trainee

**Jennifer Worsley**  
Operations and Maintenance  
Environmental Scientist

**Patrick Wright**  
San Luis Field Division  
HEP\* Electrician Apprentice

**Dan Wyand**  
Delta Field Division  
HEP\* Electrician I

**Yonghui Yang**  
Delta Field Division  
HEP\* Electrician Apprentice

\*Hydroelectric Plant

## Jennifer Bingaman

In a quest for DWR knowledge, Jennifer Bingaman's career path led her to six different divisions before retiring with 26 years of DWR service in December.

"I wanted to know DWR," said Jennifer, who retired as an Associate Governmental Program Analyst for the Central Valley Flood Protection Board. "Staying in one division was not going to give me that opportunity. I was able to get a better understanding about the importance of DWR's goals, including its role in dam safety and flood management."

A native of Peru, Jennifer is no stranger to moving around. As a child in 1960, Jennifer and her family came to live in San Francisco.

Before joining DWR in 1988, Jennifer worked as seasonal clerk in the Franchise Tax Board's Mail Room and later as a Tax Program Assistant handling calls from taxpayers.

Jennifer's DWR journey began as an Office Assistant with the Contract Services

Office, where she worked on contracts and assisted in creating a database for tracking contracts. Jennifer expanded her contract skills and enjoyed public outreach with the Office of Water Education (now the Public Affairs Office).

While with the State Water Project Analysis Office, Jennifer learned about power contracts and transitioning to deregulation. As Office Services Supervisor for the Division of Safety of Dams in 1999, Jennifer saw the staff's dedication to preventing dam failures in California. She learned about flood emergencies, such as the Jones Tract levee break and repair in 2004, with the Division of Flood Management. She also worked on Flood Management's reorganization, concept papers, Budget Change Proposals and Capital Outlay Budget Change Proposals in addition to tracking expenditures for the Sacramento-San Joaquin Comprehensive Study.

"As part of the DWR team that worked on Jones Tract repair, this emergency really touched my heart to see the devastation of people's homes totally flooded or washed away," said Jennifer, who was honored by DWR for her work in the emergency.

Jennifer assisted with the creation and move of the new Levee Repairs and Floodplain Management Office in 2007. She also took a two-year Training and Development assignment as an Administrative Officer II with the Central Valley Flood Protection Board.

"Leaving the State, and especially the Board, is bittersweet for me because, although I will be retiring, I will miss seeing and working with 'my family'—the Board's terrific staff," said Jennifer. "I feel working at the Board has been a great experience. I have also met many wonderful DWR employees that I will miss and hold dearly in my heart, but it is time for a new adventure for me." 💧







## Pete Scheele

Not many people working at DWR today can remember when you could stand next to the California Aqueduct and see nothing but concrete in the channel. Pete Scheele was one of those people.

Pete has seen a lot of water flow over and through the proverbial dam in his 34-year DWR career, which ended with his December retirement after serving as Chief of the Oroville Field Division.

"My dad was an operator at San Luis in the late 1960s, and I went to work with him a few times," Pete said. "I've been around the State Water Project since I was 10 years old and can remember when there was no water in the aqueduct south of the Dos Amigos Plant."

Pete's dad retired from San Luis in 1979, and Pete joined DWR a year later as an apprentice in the Delta Field Division. Over the next quarter century, he worked his way up in various operator and supervisor positions, arriving at the Oroville Field Division as its Chief in July 2005.

"It's been an eventful eight years, characterized primarily by the ongoing dry conditions that influenced operations in the Division," said Pete.

Also big has been the Oroville Dam's relicensing, which has been under way since 2007.

"We were hoping to have it completed during my tenure," said Pete. "The highlights of the relicensing are still to come, but we've positioned the dam to be successful."

Pete has overseen major upgrades of the plant's fire detection and prevention systems. "Once they're done," said Pete. "I think Hyatt Powerplant will be the poster child for the rest of the department, the Cadillac of all the plants."

The Oroville Field Division also is dealing with the aftermath of the Thanksgiving Day 2012 fire at the Thermalito Powerplant. The incident has been thoroughly studied by DWR and was found to have started in an electrical cable tray. Pete said once repairs are completed and the plant is back in operation, its firefighting capability along with other operations will be much improved.

Pete said there's a tinge of regret in retiring before those projects are done, and he feels the same to leave the department after 34 years. "I've always felt like I wasn't going to work so much as going to a second home with friends and family," he said. "We sometimes forget how much the water project means to the state of California, the country and maybe the world."

There's one thing he won't regret, though—the time not spent with a fishing rod in his hand. "Here I am, in one of the best fly fishing areas of the West, and I've hardly done any of it," he said. "Imagine a still calm lake with a light fog coming off the water—that's when the excitement of a lifetime begins. Trout on!"

When that happens, we're all best advised to stay out of Pete's way. 💧

## Promotions

**David Arrate**  
Statewide Integrated Water Mgmt.  
Senior Engineer

**Jesse Bishop Sr.**  
Technology Services  
Systems Software Specialist III (Supv.)

**Lauren Bisnett**  
Public Affairs Office  
Information Officer I

**Rosa Blanchard**  
Southern Field Division  
Administrative Officer II

**Michael Bradbury**  
Environmental Services  
Program Manager II

**Holly Canada**  
Bay-Delta Office  
Engineer

**Lincoln Carey**  
Flood Management  
Utility Craftworker

**Zhiqiang Chen**  
Bay-Delta Office  
Senior Engineer

**Tami Clark**  
Flood Management  
Utility Craftworker

**Nancy Clark**  
Northern Region Office  
Business Service Assistant

**Jessica Conrad**  
Environmental Services  
Program Manager II

**Gabriela Coronado**  
Business Services Office  
Staff Services Analyst

**Donna Cruz**  
Delta Field Division  
Chief HEP\* Operator

**Stacey Cunningham**  
Business Services Office  
Associate Information Systems Analyst

**Gregory Dudley**  
Flood Management  
Utility Craftworker

**Cassandra Enos-Nobriga**  
Environmental Services  
Program Manager III

**Karen Enstrom**  
Environmental Services  
Program Manager II

**Amapola Francisco**  
Fiscal Services  
Accounting Officer

**Rolf Frankenbach**  
North Central Region Office  
Senior Environmental Scientist (Supv.)

\*Hydroelectric Plant



## Promotions

### Guynel Gagot

Business Services Office  
Business Service Officer I

### Melissa Garcia

San Luis Field Division  
Associate Governmental Program Analyst

### Baljit Gill

San Luis Field Division  
Associate HEP\*\* Utility Engineer

### Laura Gonzales

Executive  
Executive Assistant

### William Harrell

Executive  
Program Manager III

### Randolph Hsieh

PARO\*\*\*\*  
Senior HEP\*\* Utility Engineer (Supv.)

### Lisa Huff

San Luis Field Division  
Business Service Officer I

### Wajih Iqbal

Operations and Maintenance  
Associate Control Engineer

### Harpreet Kaur

Operations and Maintenance  
Associate Control Engineer

### Ashraf Keval

Technology Services  
Systems Software Specialist III

### Seth Lawrence

Northern Region Office  
Senior Engineer

### Aric Lester

Northern Region Office  
Environmental Program Manager I (Supv.)

### Cheryl Luu

PARO\*\*\*\*  
Associate HEP\*\* Utility Engineer

### Mahmoud Mabrouk

State Water Project Analysis Office  
Senior Engineer

### Katherine Marquez

Environmental Services  
Senior Environmental Scientist (Supv.)

### Lorraine Marsh

Statewide Integrated Water Mgmt.  
Research Program Specialist III

### Douglas McElvain

Southern Field Division  
HEP\* Operations Superintendent

### Jack Montgomery

Operations and Maintenance  
Water and Power Dispatcher

\*Hydroelectric Plant  
\*\*Hydroelectric Power  
\*\*\*\*SWP Power and Risk Office

## Kathy Kelly

Growing up in Barstow in the middle of the bone-dry Mojave Desert, Kathy Kelly never imagined she'd be a key player in preserving California's water resources one day. Kathy retired in December after 16 years as the Bay Delta Office Chief and 24 years at DWR.

Her career had an uncertain start. "I was a college dropout—an honor student coming out of high school who didn't have a clue about what I wanted to be," she said, "so I left college and came home. At least my parents' support there was more direct. I married and had a son, but after eight years of being out of college, I realized I wanted to focus on a career and apply my technical capabilities in math and science to projects that would help people in their daily lives."

Kathy earned a Civil Engineering degree at the University of California at Irvine and immediately went north to Alaska to survey streams and rivers along the proposed route of the natural gas pipeline from Prudhoe Bay.

She left her job and secured a masters degree at the University of California at Davis in Engineering with an emphasis on Water Resources Planning and Management.

Kathy joined the U.S. Bureau of Reclamation and worked on Central Valley Project operations for four years, then moved to DWR planning short- and long-term operations for the State Water Project. After working in the Division of Planning and as the Engineering Assistant to Chief Deputy Bob Potter, she was

promoted to Chief of the Division of Planning, which has evolved to the Bay Delta Office.

"DWR has a legacy and focus on engineering, but over time, the importance of understanding fish biology and ecosystem processes has grown," Kathy said. So has awareness that the Delta needs careful and comprehensive management. Kathy believes one of her major contributions was serving as DWR's representative on the Delta Protection Commission, which exercises land-use oversight, from 2003 through 2009.

Water will be big in her retirement years, too. Kathy and fiancé Jim Gibson, who also retired in December, will spend lots of time on their C-Dory 23 cruising the Delta. They'll float above it, too; Jim's hobby is hot-air ballooning, and Kathy is crew chief.

"I love everything about the balloon events, even the part about getting up at 4:30 in the morning," she said. "Early mornings are best for flying."

"As crew chief, I follow the balloon, anticipate where Jim will land and then find the house associated with the property," said Kathy.

Will wedding bells ring for Kathy and Jim? "We move at glacial speed," she laughed, noting their long engagement. "Maybe we'll have a ceremony when a new water conveyance system is completed for the Delta. By that time, we might come down the aisle using our walkers!"

Or maybe they'll float in on a balloon. 💧







## Bruce Agee

Technology's steady march has made it easy to find even the most obscure documents on the Internet, and sometimes what you find makes you smile—like a 1982 letter from a consulting firm to the Marin Municipal Water District that begins:

"Recently Bruce Agee, a staff member of the Instream Flow Group of the State Water Resources Control Board, pointed out some errors in Table 3 of the report we prepared for you in February 1980."

That eagle-eyed employee is the same Bruce Agee who retired in November as a senior environmental scientist after nearly 26 years at DWR. The smile comes when you realize that early in his State career, Bruce was identifying ways to improve data reporting.

"I discovered once I got to the department that a lot of historic information was in jeopardy," Bruce said. "The original DWR database was failing. We kept information in our files, but it couldn't be shared easily or found in one place. We spent millions of dollars every year collecting information that would evaporate if we didn't know how to store it."

Through a series of small steps, Bruce developed a data system that captured both data and quality control. It's called the Field

and Laboratory Information Management System, which feeds the online DWR Water Data Library. Recently added was the historic State Water Project data that was almost lost to time.

Unfortunately, technology's steady march hasn't helped his wife Barbara in her struggle with Early Onset Alzheimer's disease. Caring for her has been central to Bruce's life for the past 11 years. He's telecommuted from his Dixon home three days a week since 2008.

"She's in the advanced stages now," said Bruce. "She has no language and depends on me totally. Once in a while there's a little something, a chuckle when she enjoys something. She's a sweetheart."

Bruce wanted a hobby he could pursue at home while supporting his wife, and he's now a backyard astronomy enthusiast. "Life happens, and I'm going on the assumption there will be a chapter for me after all of this," he said.

Bruce turned one of the pages in that chapter in his retirement's first month by attending the Arizona Science and Astronomy Expo in Tucson, Arizona. When recalling his DWR chapter, he said he'll always remember the "many dedicated professionals" he's worked with.

No doubt, the feeling is mutual. 💧

## Promotions

**Sheryl Moore**  
San Luis Field Division  
Utility Craftsworker Supt.

**Robert Nazabal**  
Southern Field Division  
HEP\* Mechanical Supervisor

**Earl Nelson**  
Executive  
Program Manager III

**Emiliano Nunez**  
Technology Services  
Staff Information Systems Analyst

**Joseph Ortega**  
Technology Services  
Staff Information Systems Analyst

**Stephanie Pettitt**  
Technology Services  
Staff Information Systems Analyst

**Leslie Pierce**  
Statewide Integrated Water Mgmt.  
Program Manager II

**Cynthia Pierson**  
Executive  
Executive Assistant

**Jamie Polster**  
Human Resources Office  
Associate Personnel Analyst

**Robin Rodriguez**  
Business Services Office  
Business Service Officer I (Supv.)

**Gregory Rowe**  
PARO\*\*\*\*  
Senior HEP\*\* Utility Engineer (Supv.)

**Fawm Saefong**  
PARO\*\*\*\*  
Electrical Engineer

**Marjorie Sales**  
Technology Services  
Associate Information Systems Analyst

**Brian Schreier**  
Environmental Services  
Senior Environmental Scientist (Supv.)

**Preet Karan Singh**  
Delta Field Division  
Electrical Engineer

**Beverly Snipes**  
Operations and Maintenance  
Associate Governmental Program Analyst

**Adele Taylor**  
Operations and Maintenance  
Systems Software Specialist III (Supv.)

**Anna Tran**  
Flood Management  
Associate Governmental Program Analyst

**Joseph Trujillo Jr.**  
Delta Field Division  
Senior HEP\* Operator

\*Hydroelectric Plant  
\*\*Hydroelectric Power  
\*\*\*\*SWP Power and Risk Office



## FROM THE DIRECTOR

The beginning of a new year is a good time to renew our department's commitment to safety. People are DWR's greatest asset and our safety and health is critical to the department's missions. That is one reason why safety is a core value at DWR and why employees are not only empowered to stop any unsafe act on the job, we are all responsible to do so.

DWR's Safety System goes beyond the workplace. Injuries and accidents—whether at work or home—take an emotional toll on us and our coworkers, as well as our families and friends. Our DWR Safety System is designed to keep us safe at work and carry that safety attitude and awareness home to our family and friends.

This year let's thank our coworkers when they do the right thing to do the job safely, and remind them when you see an unsafe short cut. Share information about a near miss whether at work or home. Take the time to do your JHA and get the job done without incident. Slow down and think about what you are doing and maintain a safe attitude. This way we will all live safe and work safe.

Thank you for your recommitment to safety, let's have a safe 2014.

LIVE SAFE | WORK SAFE,

Mark W. Cowin  
Director

## NEW YEAR'S SAFETY RESOLUTION

While many of us make resolutions in January, often they do not involve safety. As part of a recommitment to safety it would be a good idea for each of us to make one or two Safety Resolutions that are most meaningful for us at work and promise to keep them. These can serve to keep us all a little safer this year and return home safely to our families every day. Focusing on a safety resolution that you know can improve your safety performance can make a difference for you and your division or office, and ultimately the entire DWR. A few examples include:

- Wear your Personal Protective Equipment (PPE) 100% of the time
- Begin each meeting you attend with a safety moment.
- Improve your Job Hazard Analysis (JHA)
- Report near misses
- Praise coworkers when he/she does and action or job safely
- Take safety home with you each night

**CONTACT DWR SAFETY OFFICE** All of us working together and learning from each other is how we can make the best improvements to our safety performance. In that spirit, please contact the DWR Safety Office at [dwrsecurityoffice@water.ca.gov](mailto:dwrsecurityoffice@water.ca.gov) if you:

- Have a safety concern or question
- Want to share a safety story or moment
- Want to share a near miss





## State Service Anniversary

### 40 Years



**Michael Nolasco**  
Operations and Maintenance  
Water Resources Engineering Associate

### 25 Years



**Linda Ackley**  
Executive  
Attorney IV



**Barbara Graham**  
Technology Services  
Assistant Information  
Systems Analyst



**Sandra Maxwell**  
FloodSafe Environmental  
Stewardship and Statewide  
Resources Office  
Senior Engineer



**Glenda Porter**  
Delta Field Division  
Administrative Officer II



**Rodney "Scott"  
Zimmerman**  
Operations and Maintenance  
Hydroelectric Plant  
Technician III

No Photo Available—

**James Williams**  
San Joaquin Field Division  
Hydroelectric Plant Electrical  
Supervisor

### Promotions

**Jimmie Wang**  
Technology Services  
Systems Software Specialist III (Supv.)

**Wesley Watson**  
Operations and Maintenance  
Senior Water and Power Dispatcher

**Nicole Wietsma**  
Business Services Office  
Office Technician (Typing)

**Nikki Willson**  
Business Services Office  
Associate Information Systems Analyst

**Jean Witzman**  
Environmental Services  
Program Manager I

**Hao Xie**  
Bay-Delta Office  
Senior Engineer

**James Zetzsche**  
Southern Field Division  
Associate HEP\*\* Utility Engineer

### Retirements

**Steven Bloomfield**  
Delta Field Division  
Senior HEP\* Operator

**Thomas Boullion**  
Northern Region Office  
Environmental Scientist

**David Duecker**  
Southern Field Division  
Associate HEP\*\* Utility Engineer

**Aurby Finley**  
Southern Field Division  
Building Maintenance Worker

**Mary Hadden**  
Flood Management  
Senior Environmental Scientist

### Retirements

**Susanna Kong**  
Operations and Maintenance  
Systems Software Specialist III (Supv.)

**David Lane**  
State Water Project Analysis Office  
Water Resources Engineering Associate

**Saunthy Nicolson-Singh**  
Public Affairs Office  
Associate Governmental Program  
Analyst

**Richard Parmer**  
Executive  
Associate Governmental Program  
Analyst

**David Quintana**  
San Luis Field Division  
Building Maintenance Worker

**Margaret Ringler**  
Engineering  
Office Technician (Typing)

**Dolores Scherr**  
Executive  
Executive Assistant

**Stephen Simmons**  
Flood Management  
Utility Craftsworker

**Gene Sours**  
Operations and Maintenance  
Associate Control Engineer

**Kelly Staton**  
Northern Region Office  
Senior Engineering Geologist

**Mark Storz**  
Operations and Maintenance  
Mobile Equipment Superintendent I

\*Hydroelectric Plant  
\*\*Hydroelectric Power

## CONGRATULATIONS

... to DWR's Newest Parent:

**Matthew Meyers**, an Engineer with the South Central Region Office, has a son named Leopold "Leo" Nathan Towhee Meyers, who was born October 23 weighing eight pounds, six ounces and measuring 22 inches long.

**Ming-Yen Tu**, an Engineer with the Bay Delta Office, has a son named Emrys, who was born on December 20, 2013 weighing 7.2 pounds and measuring 19.75 inches long.

**Benjamin Martin**, a Fish and Wildlife Scientific Aid with the Bay Delta Office, has a son named Luke, who was born on January 3, 2014 weighing 7.9 pounds and measuring 19.5 inches long.





# In Memoriam

**Arnold Sanchez**, a Supervising Engineer in the Division of Engineering since 2008, passed away unexpectedly on December 26 at the age of 44.

Arnie joined DWR in 1993 as a Junior Civil Engineer and consistently assumed greater responsibilities through several promotions. He left his mark on DWR projects throughout the state.

Early in his career, Arnie helped design the San Bernardino Tunnel Intake

Reconstruction project and developing alternatives for fish control and flow control structures in the South Delta. He was the lead engineer on the Thermalito Diversion Dam Radial Gate Rehabilitation,

the expansion of the Feather River Fish Hatchery Facility and many other projects.

Later, Arnie managed and supervised all aspects of the \$60 million Tehachapi East Afterbay project.

Most recently, Arnie had been the co-project manager for DWR's Environmental Stewardship Implementation Plan, an implementing team member for the Delta Habitat Conservation and Conveyance Program and was

on DWR's Climate Change Matrix Team.

Several of his DWR colleagues shared memories of an "all-around good guy."

*"I relied on Arnie for scheduling, cost estimating, liaison with environmental firms—he wore multiple hats. He attended many meetings on my behalf, and people started asking me not to attend, they liked Arnie so much."*

—Gordon Enas, Chief, Delta Engineering Branch, Division of Engineering

*"Arnie's work ethic was outstanding. He was everything an engineer should be—always dependable, always willing to do the work, to handle the assignment. We carpooled for many years and shared lots of stories, but you didn't need an intimate knowledge of what Arnie was doing in his life. Just his smile, just his presence—that was enough to know Arnie."*

—Joe Royer, Chief, Dams and Canals Section, Division of Engineering

*"Carpooling was always fun with Arnie. He would make himself a big breakfast and log onto ESPN while eating it. Although I tried my best to match his sports and statistics knowledge, he always had me one-upped by the time he got in the car. I'll miss his company and those fun exchanges."*

—Joe Barron, Chief, Pipelines Section, Division of Engineering

*"We were at a gathering one evening,*

*and Secretary John Laird was there.*

*Arnie and John struck up a conversation, and I think they connected that night on LinkedIn and set a date for lunch. That's just the kind of guy Arnie was. The secretary of the Resources Agency wanted to go to lunch with him."*

—Mark Pagenkopp, Senior Engineering Geologist, Division of Engineering

*"Being young engineers, our families got together a lot and socialized —line dancing, Halloween parties, a tight little group. We started playing volleyball, and Arnie was an enthusiastic learner and became a very good tournament player. We played volleyball every week since 1993, right up to the very end."*

—Jim Sung, Senior Engineer, Division of Operations and Maintenance

*"I've known Arnie since he started with the Department in 1993. His positive demeanor, enthusiastic attitude and sincerity in all he did made working with him an extreme joy. It is a huge loss for DOE and an even bigger loss for everyone who considered him a friend."*

—Jeanne Kuttel, Chief, Division of Engineering

Services for Arnold Gil D. Sanchez of Roseville were held in early January. He is survived by his parents, Anastacia and Roger, and siblings Alfred, Angel Jr., Angela, Ana Marie and Arden. Interment was at St. Mary's Cemetery in Oakland. 💧

**Ronald Wermuth**, a retired Mechanical Construction Supervisor in the Division of Engineering, passed away at the age of 71 on August 24, 2013

"Ron was a dependable and knowledgeable member of the construction contract inspection staff at Sacramento Project Headquarters," said Jim Peddy, former Chief of Sacramento Project Headquarters. "Ron served with staff of many projects. The Schaeffer Fish Barrier and the Merced River restoration projects are Ron's greatest achievements. Both of those projects had great challenges and Ron was the only construction staff member assigned with exceptional results."

In 1989, Ron began his DWR career

as Construction Inspector and later Construction Inspector Supervisor. On the Merced River Salmon Habitat Enhancement project, he supervised the restoration of four miles on the Merced River to its original spawning habitat. His other projects included the Devil Canyon Powerplant and the Pearblossom Pumping Plant. He retired in 2004 and worked as a retired annuitant until 2008.

Raised in old Kernville and the Kern River Valley, Ron was Paiute-Shoshone, Kawaiisu, Koso and Yaqui, and Miwok from his father's side. He served in the U.S. Navy for four years and the Coast Guard for six years. Serving as an intimate counselor with the Department of

Corrections and Rehabilitation for Native American prisoners, Ron had a deep sense of duty and service.

Appointed by the Native American Heritage Commission as a "Most Likely Descendant" for Kern County, Ron was authorized to take Native American remains from the Kern County Coroner for reburial in a spiritually and culturally sensitive manner. He volunteered with the Governor's Office of Planning and Research and the Resources Agency to develop legislation aimed at increasing the protection of sacred tribal lands.

He is survived by his wife, Carol, three daughters, a son, two sisters, nine grandchildren, and two great grandchildren. 💧



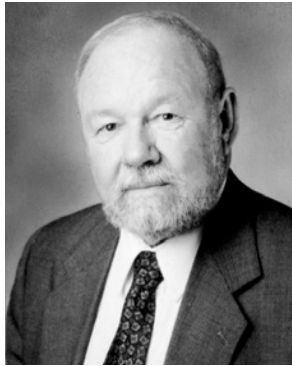
**Ed Craddock**, DWR's former Chief of the Water Conservation Office who left his mark throughout the Northern California water community, died at age 75 on November 4 at Rideout Memorial Hospital in Marysville.

Mr. Craddock was a 25-year DWR employee when he left the department in 1999 to become the first Director of the Butte County Department of Water and Resource Conservation. He retired from that post in 2005 and continued his involvement with water issues as a member of the Butte County Water Commission.

Upon retirement, Mr. Craddock created a scholarship at Butte College in Oroville to benefit students with a serious commitment to issues related to natural resource conservation.

Jim Rich, an economist in DWR's Division of Statewide Integrated Water Management, said Mr. Craddock was his mentor when he joined the department in 1980. "I didn't know much about water resources and conservation," he said, "and I would go to Ed with questions. He'd explain things patiently and was always friendly and helpful."

Production Services Specialist Frank Farmer in DWR's Division of Technology Services has similar recol-



lections of Mr. Craddock's impact on DWR. "Ed was keen on giving opportunities to young staff members starting out their careers," he said. "He got

us involved in unique, cutting-edge projects. Technology was taking off in agriculture in the early 1980s, and he wanted DWR to participate as a means of promoting water use efficiency."

Mr. Craddock leaves behind his wife Diana and six children, 10 grandchildren and 11 great-grandchildren. His son Ted is Chief of DWR's Hydropower License Planning and Compliance Office. Ted said his dad "felt privileged to work for DWR and frequently shared fond memories of his work and friendships from his years with the department."

"I know he really wanted to help people who were interested in natural resources," Ted said. "He saw a great opportunity to help students get started in the natural resources field through his support of Butte College."

The family suggested that remembrances be made with a donation to the Edward A. Craddock Endowed Scholarship at Butte College Foundation. 💧

**Pat Fellos**, a retired Management Services Technician, passed away on September 21 at the age of 71.

A Native of Aberdeen, Washington, Pat graduated from Weatherax High School in 1960 and attended Washington State University until moving to San Francisco. Four years later, she moved to Sacramento where she earned a Business Administration degree from Sacramento State in 1973.

Working more than 22 years for the State, Pat worked in the Environmental Services Office's Administrative Branch until her retirement in 2002. She mainly worked with procurement, fleet reports and time keeping.

Pat was always stepping up to help whoever needed assistance in the office. She was an asset to the office, had many friends, and was respected by all. She will be missed and remembered with the highest regard.

Pat is survived by her husband of 48 years, Jim, two children and four grandsons. 💧

**Richard Kretsinger** passed away on September 24, 2013 at age 87.

He lived a full and robust life. While in high school, Dick participated and excelled at basketball, football and track. At age 18, he served in the 5th Army, 10th Mountain Division, 85th Mountain Infantry in Italy during World War II. After returning to California in 1946, Dick graduated with an Engineering degree from the University of California at Berkeley.

In 1952, he married Muriel, his wife of 60 years. Together, along with their two children, they enjoyed an active life which included many favorite pastimes, such as fishing, hiking, hunting, abalone diving, photography and traveling to exotic places.

After being hired directly from the university upon graduation, Dick began his career in civil engineering with the Division of Water Resources. He started in the Water Quality Branch in 1950.

Dick helped set up the functioning organization and worked to help start many projects for the Davis Grunsky Program.

In 1964, during the historic north coast flood, Dick was assigned to run the Department's portion of the newly established Satellite Eureka Flood Center. The Flood Center was an extension of the cooperative effort between the Department and the U.S. Weather Bureau.

In 1967, Dick transferred to the Red Bluff office where he worked until his return to Sacramento in 1972. Dick later served as Chief of the Delta Studies Program, which included environmental studies examining the potential impacts to fishery resources. Some of the studies helped to define the water operations relative to fish habitat.

Dick's final career move before retiring in 1989 was into a position as Executive Assistant to Deputy Director Bob Potter. 💧





**Robert Liddington**, a retired Senior Water and Power Dispatcher, passed away at the age of 69 on October 29, 2013 in a tragic tractor accident at his home.

An Air Force radar operator on Okinawa in the 1960s, Robert had a Master of Business Administration degree from the University of Phoenix.

Prior to working in DWR's Project Operations Center for the Division of Operations and Maintenance, Robert was a supervisor in power



control at Pacific Gas and Electric Company for 27 years. He worked 10 years in DWR's Water and Power Dispatching Section helping monitor and operate the California State Water Project.

Robert assisted with the transition to the deregulated transmission and energy markets and with the implementation of the California Power Exchange and the California Independent System Operator. During the energy crisis in 2001, Robert was instrumental in maintaining SWP operations while purchasing energy for the residents and businesses of California. He retired in 2005.

After his retirement, Robert, a longtime resident of Knightsen, enjoyed traveling with his wife. He was a member of the El Dorado RV Club.

Preceded in death by his son, Robert is survived by his wife of 38 years, Katherine, one sister, two sons, four daughters, 17 grandchildren and three great-grandchildren. 💧

**Clara Silva**, retired Composing Technician in DWR's Executive Office, passed away at the age of 80 on September 3, 2013.

The sole member of Executive's Stenopool for the last 15 years of her career, Clara retired in 1995 with 35 years of State service. Her State career began with the Department of Employment. Before joining DWR in 1969, she worked as bookkeeper for a private firm and as an Administrative Assistant for the University of California at Davis.

During DWR's conversion of technology from power keyboard and word processor to personal computer, Clara worked on several assignments for Central Records, Land and Right of Way and Executive.

Clara is survived by two daughters, a granddaughter and great granddaughter.

Memorial service was held at Glen View Cemetery. 💧



**Theresa Oakley**, an Office Services Supervisor II with Business Services Office, Retention and Retrieval Unit, passed away at the age of 53 on October 17, 2013.

"Theresa was an awesome, caring and knowledgeable individual," said Kora Bitcon of the Business Services Office. "She added so much to this organization with her dedication, hard work and her ambition to go beyond the call of duty, but most of all, Theresa always had a sincere smile and warm greeting for those she interacted with on a daily basis and will be missed greatly by all who knew her and had the opportunity to work with her."

A longtime DWR employee who oversaw all of DWR paper records from engineering maps to personnel documents, Theresa began her 34 years of State service in 1979. She supervised nine file stations throughout the Sacramento area in the housing of DWR's records ranging in topics from dam safety to safe drinking water bonds. She was a key member on the team for the implementation of Documentum, where DWR's electronic records are managed.

"Theresa and I attended Luther Burbank together, and we graduated in 1978," said Lori Brown of DWR. "Ten years later, I joined DWR and to my happiness and surprise Theresa worked right across the hall. Theresa was always smiling, real, down-to-earth and professional. She schooled me on how to read the number coding of DWR's filing system while I worked on a project. Theresa was responsible for all of my office's records and went beyond the call of duty to help me find old documents whether in hard copy or microfiche."

For her outstanding service in maintaining and managing DWR's records, Theresa received a Unit Citation Award in 1990. In 2001, she received a Unit Citation Award for her consistently high level of efficient, prompt and helpful service in maintaining and managing the records of DWR. In 2009, Theresa received an Outstanding Office



Services Accomplishment Award and Sustained Superior Accomplishment Award for her outstanding performance in support of her customers as well as management, her commitment to providing exemplary customer service and her commendable supervisory efforts in her Unit.

"Theresa left a legacy of how to be a helpful and grounded person," said Andrea Glasgow of the State Water Project Analysis Office. "Over the past 10 plus years, she helped me find DWR documents that others could not find, and she was always up for the challenge."

Theresa is survived by three children and eight grandchildren. 💧



# A Greener Commute



**DWR employee Cindy Garcia** cuts the size of her carbon footprint as she commutes to work.

Concern about the environment, greenhouse gas emissions and dependence on foreign fuel made Cindy's decision to choose an electric vehicle easy.

"I have a 100-mile commute," said Garcia, an Environmental Program Manager with the Division of Environmental Services in West Sacramento. "For me, range was everything."

The range led her to a plug-in hybrid, a vehicle that uses both gas and electricity. The plug-in hybrid also met the super-low emissions standard, another plus for Cindy.

By using electric vehicles, Cindy is helping reduce greenhouse gas emissions, air pollution and dependency on fossil fuels.

To learn about ways to go "Green," visit [http://aquanet.water.ca.gov/dwrgreen/green\\_working.cfm](http://aquanet.water.ca.gov/dwrgreen/green_working.cfm)

On February 1, 2014, the Department of General Services (DGS) began offering parking incentives to State employees parking in a DGS parking facility and who drive a battery electric, plug-in hybrid electric or fuel cell vehicle. To learn more about DGS' Zero Emission Vehicle Parking and Pricing Policy, visit [www.dgs.ca.gov/dgs/about/parking.aspx](http://www.dgs.ca.gov/dgs/about/parking.aspx)





## DWR Mission Statement

To manage the water resources of California  
in cooperation with other agencies, to benefit  
the State's people, and to protect, restore, and  
enhance the natural and human environments.

Environment Health and Safety Officer Michael Parreira of Delta Field Division performs daily scaffolding inspections at the Clifton Court Forebay gate refurbishment and reattachment project. The scaffolding keeps personnel safe during inspections and repair of intake gate 2 that broke loose in July of 2013. Located 10 miles northwest of the city of Tracy, the Forebay stores and regulates flows into Banks Pumping Plant.